

Draft Response to Comments
Received on the Forest Plan Alternatives
Analyzed in the Draft Environmental Impact Statement

Coconino National Forest

Forest Plan Revision

May 2016

This report includes draft responses to the comments the Coconino National Forest received on the proposed revised plan and alternatives to the proposed revised plan during the 90-day comment period on the Draft Environmental Impact Statement (DEIS) that ended in March 2014. These draft responses to comments provide insight into how the Coconino National Forest addressed the comments and why adjustments were made to the proposed revised plan and Alternative C. These responses are not final and may be adjusted as work continues on this effort.

The Coconino National Forest is still working on the comments on the DEIS. Responses to those comments and final responses to the comments on the proposed revised plan and alternatives will be included in the Final Environmental Impact Statement which should be available in Spring 2017.

The draft responses included in this report are organized alphabetically by the name of the commenter or organization that provided the comment. To search this file for the name of a commenter or a particular topic, press the keyboard buttons labeled 'Ctrl' and 'F' at the same time to open a search feature. This search feature can help you find any word or series of words in the report.

Coconino National Forest

Forest Plan Revision: Response to Comments

5/16/2016

11:40:08 AM

Commenter: Anderson, Ilona

Comment:

I believe that the Forest Service management area be enlarged to cover the entire footprint of the Walnut Canyon Study Area and consider it for a special designations with restrictions on trading land. The restrictions should be such that only an act of Congress could change this.

Response:

No change has been made in response to these comments. The boundary of the Walnut Canyon Study Area would be difficult to find on the ground, which would make implementation difficult. The Walnut Canyon Management Area boundary was developed with topographical features and landmarks in mind to make the boundary more locatable on the ground. The Walnut Canyon Study has been completed and transmitted to the Secretary of Agriculture. The study presents 3 options to the Secretary, one of which is consideration of the area for special designation. The Secretary currently has the study under consideration and the Forest is waiting for a recommendation on how to proceed.

Draft

Commenter: Anderson, Ilona

Comment:

Secondly I see very little about conserving water. This has been one of the most contentious issues in the last couple of years. I strongly state that snowmaking should be an incompatible use on the Coconino Forest. The EPA predicts that springtime precipitation is likely to decrease significantly, making it more difficult to meet water demands during the summer, when conditions are the driest. This also means that there will be an increase in forest fires. The time is near when there will be "Peak Water". There could be conflicts even between Mexico and the United States. It would be all about water rights. So, condoning snowmaking is really in opposition to the study by the EPA. It is also predicted by this study that there will be at least 30% less water in the future.

Response:

The Forest Plan does not expressly declare snowmaking as an incompatible use on the Forest. However, the Forest Plan does contain several components that provide a framework that can be applied to protect the limited water resources in this region, the federally listed endangered San Francisco Peaks Ragwort, and the San Francisco Peaks Traditional Cultural Property. The Watersheds and Water section includes desired conditions to sustain water quantity (base flows) of intermittent and perennial streams within the historic range of variability. See FW-Water-DC-5. Water quality and water quantity is desired to be at levels that support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities, and, at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. See FW-Water-DC-6. Finally, it is a desired condition for water quality to meet or exceed Arizona water quality standards and support identified designated beneficial uses. See FW-Water-DC-7. To be consistent with the Forest Plan, a proposed activity must be consistent with these desired conditions or a forest plan amendment would be required to authorize the activity. The Forest Plan includes a desired condition for habitat conditions to contribute to the survival and recovery of listed species and contribute to the delisting of species under the Endangered Species Act. See FW-WFP-DC-2. As with the concerns with water quantity and quality, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. The Forest Plan also includes a desired condition for traditional cultural properties to be preserved and protected for their cultural importance. As with the concerns with water quantity and quality and endangered species, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. Accordingly, the strategic approach employed by the Forest Plan provides guidance relevant to the concerns expressed in these comments without being overly prescriptive and dismissing an activity without considering it at the project level where site specific information can inform the decision.

Commenter: Anderson, Ilona

Comment:

To begin with I, along with many other groups, am in favor of plan C. Plan C has more protection for the wilderness than B. Considering that Flagstaff and other areas will continue to be developed it is extremely important that we protect the wilderness or else it will be gone, covered with buildings

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Aniol, Dennis & Janet

Comment:

We have only 3.5 miles of designated trails in our area. To us there does not appear to be any interest from Coconino National Forest personnel in helping us get a designated trails system. In reality there is already a trail system here, but it is not recognized and marked.

Response:

The Forest Plan has been adjusted in response to these comments. Desired conditions have been added to the Verde Valley Management Area that guide trail system design. See MA-VerdeV-DC-2 and 3. Also, several management approaches have been added to the Verde Valley Management Area to remind forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Aniol, Dennis & Janet

Comment:

The road and camp site closures over the past several years in the Beaver Creek area have deeply disappointed us. We don't know why, but the historic roads of our area never became designated forest roads. TMR left us with only one designated forest road in the Beaver Creek area. This is not sufficient and makes criminals of our neighbors who continue to use some of the roads.

Response:

Motorized access for recreational activities is addressed in several places in the Forest Plan, however no one type of recreational activity (i.e., wildlife-based recreation) is highlighted over another. One desired condition in the Roads and Facilities sections has been adjusted to address this comment. The adjusted plan component specifically acknowledges a desire for reasonable motorized access (by road) for recreation. See FW-RdsFac-DC-1. A similar desired condition in the Trails and Trailheads section applies to motorized use on trails. See FW-Rec-Trails-DC-1. The Dispersed Recreation section contains a desired condition for motor vehicle use to occur at sustainable levels while providing opportunities for a variety of motorized use types and levels of challenge for a diversity of users. See FW-Rec-Disp-DC-2. Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. The Forest Plan includes a standard prohibiting motor vehicle use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps. See FW-Rec-Disp-S-1 and FW-RdsFac-S-1.

Commenter: Aniol, Dennis & Janet

Comment:

Please let us be part of making a change to this area. Please create the Beaver Creek Management Area and make it a priority. It will take us many years to catch up. Starting work now is vital to the forest and to the safety, recreational, and economic needs of the residents in the Beaver Creek communities of Rimrock, Lake Montezuma, and McGuireville.

Response:

A separate Beaver Creek Management Area has not been added to the revised Plan. The Beaver Creek area is still included within the Verde Valley Management Area. Although a separate management area was not created for the Beaver Creek area, the language suggested for the new management area was reviewed and incorporated whenever appropriate into the Verde Valley Management Area. See MA-VerdeV-DC-1, 2, 3, and 4, MA-VerdeV-G-1, 2, and 3, and the following management approaches: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Aniol, Janet

Comment:

The Beaver Creek Preservation & Historical Society is aware of the Coconino National Forest Plan Revision and is concerned to find that there is no mention of a Beaver Creek Management Unit. It will be very difficult for the Beaver Creek Plan Area to help to construct a Coconino National Forest recognized trails system without being in a management unit.[...] Our local communities of Rimrock, Lake Montezuma and McGuireville would like to have designated trails for the benefits of safety, health, recreational and economic needs of residents. We believe that designated trails will also decrease the environmental damage from increasing numbers of social trails.

Response:

A separate Beaver Creek Management Area has not been added to the revised Plan. The Beaver Creek area is still included within the Verde Valley Management Area. Although a separate management area was not created for the Beaver Creek area, the language suggested for the new management area was reviewed and incorporated whenever appropriate into the Verde Valley Management Area. See MA-VerdeV-DC-1, 2, 3, and 4, MA-VerdeV-G-1, 2, and 3, and the following management approaches: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Aniol, Janet

Comment:

BCPHS has a particular interest in historic trails and would like to see further improvement and marking of the Chaves Trails extensions in our area.

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. For example, it includes a desired condition for a system of well-marked and well-maintained sustainable trails provides opportunities for visitors to explore the forest and surrounding areas. See FW-Rec-Trails-DC-1. The Forest Plan does not contain project and activity decisions, such as improvements and marking for particular trails. Those decisions are made at the project-level based on site-specific information.

Commenter: Anon, Tricia Egger

Comment:

I feel that off-vehicles are a disaster for the fragile desert environment around Sedona and in the Verde Valley region. If you sanction off-road vehicle areas, they should be well-confined and few and small.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not decide whether to establish any new off-road vehicle areas. The Forest Plan provides the framework that would guide site-specific consideration of new off-road vehicle areas. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. The All Recreation section includes a guideline that requires recreational activities, locations, and/or settings to be designed and managed to maintain or move towards the desired conditions for these other resources. See FW-Rec-All-G-1.

Commenter: Baierlein, Ralph

Comment:

Under Standards Acquisition of State Trust lands (as supplement to Lands Adjustment) For the purpose of conservation, pursue purchase or land exchange options for the following State sections: 22, 28, 30, and the sliver of 10 that lies south of I-40, all in T21N R8E. Those sections were contained in the City of Flagstaff's Arizona Preserve Initiative petition. [Note. The acquisition goal cited above appears in Amendment 17, new page 206-112, of the current Forest Plan. The goal emerged from the Flagstaff/Lake Mary Ecosystem Analysis and was incorporated by amendment in December 2002. The sliver of section 10 was omitted inadvertently from the text, but its inclusion was subsequently recorded in the file folder-after I pointed out the omission to District Ranger Gene Waldrip. The acquisition goal was part of a standard in Amendment 17.]

Response:

No change has been made to the Forest Plan in response to this comment; the topic is already addressed by several plan components. The forestwide Land Adjustments section in the Forest Plan includes several components that provide a management framework on this topic. A desired condition seeks a mostly contiguous land base, which could lead to efforts to bring inholdings such as the State Trust lands under management by the Forest. See FW-LndAdj-DC-1. A guideline lays out qualities that should be possessed by land to be acquired, including habitat for TES, existence of significant cultural, prevention of damages to resources, and/or improvement to management of designated special areas. Furthermore, a standard in the Walnut Canyon Management Area ensures that land adjustments in this management area will not result in a reduction of the National Forest System lands in this management area. See MA-Walnut-S-2.

Commenter: Baierlein, Ralph

Comment:

Under Guidelines Recreation (in general) Walnut Canyon and its immediate surroundings form a uniquely precious area on the Coconino NF. Inside the canyon and within one mile of the rim, protection of cultural sites and preservation of habitat for disturbance-sensitive species will take precedence over recreation. Within the canyon, trail users will be strongly encouraged to stay on the trail. [Note. The paragraph above is not intended to affect the current alignment or use of the Arizona National Scenic Trail or other trails in the Forest Service System. Rather, the paragraph looks ahead to population growth in Flagstaff and to requests for additional recreational opportunities.]

Response:

A guideline has been added to the Walnut Canyon Management Area in response to this comment. See MA-Walnut-G-1. Concerns related to recreation impacts on cultural resources and disturbance-sensitive species are also addressed in the forestwide plan components on Recreation. For example, desired conditions and guidelines emphasize low impact recreation principles and minimal resource conflicts. See FW-Rec-All-DC-5 and 6, and FW-Rec-All-G-2.

Commenter: Baierlein, Ralph

Comment:

Dispersed Camping The canyon ecosystem and Walnut Canyon National Monument are vulnerable to fires blown by a southwest wind from abandoned campfires. Consequently, dispersed camping will be prohibited for a distance of approximately three miles southward from the canyon rim along the canyon segment from Fisher Point to the eastern end of WCNM. [Note. The canyon ecosystem and the scenic values of WCNM are irreplaceable in our lifetime-or in anyone's lifetime. They should be protected from the risk of human-caused fires.]

Response:

The Forest Plan has been adjusted in response to this comment. The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions such as prohibiting dispersed camping in particular areas. However, in response to this comment, a guideline has been added to the Walnut Canyon Management Area section. It requires all activities in the management area to be managed to protect cultural sites and to preserve habitat for disturbance-sensitive species both on the forest and within Walnut Canyon National Monument. See MA-Walnut-G-1. A forestwide Dispersed Recreation desired condition could also guide future decisions on this topic. See FW-Rec-Disp-DC-3. There are management approaches in the Fire Management section regarding coordinating with other jurisdictions on prescribed and wildland fires. They read: In all ROS classes and in wilderness, prescribed fire and wildfires managed for resource objectives can be appropriate tools to treat and restore vegetative composition, structure, and function where fire is a primary natural disturbance. Coordinate with other jurisdictions such as communities, service providers (infrastructure), and Federal, State, county, and local entities regarding prevention, preparedness, planned activities, and responses to wildland fires. Notify the above regarding the upcoming and ongoing fire season and any prescribed fire activity. Coordinate access for initial attack and suppression activities with responsible jurisdictions to reduce response times and address public and firefighter safety. Encourage the development and implementation of community wildfire protection plans (CWPPs) to promote public safety and to reduce the risk of wildfire on non-Forest Service lands.

Commenter: Baierlein, Ralph

Comment:

Under Desired Conditions Supplement to "Roads" To protect cultural sites and to preserve habitat for disturbance-sensitive species, roads open to the public that currently run within one mile of the canyon rim will be gated shut or relocated. No new roads open to the public will intrude into a one-mile buffer zone around the canyon. For the purposes of this paragraph, the relevant part of the canyon extends eastward from Fisher Point to the eastern end of Walnut Canyon National Monument. [Note. In fall 2001 or winter 2002, NPS Superintendent Sam Henderson requested of the Forest Service that public road access be eliminated in a buffer zone extending one mile from the rim of Walnut Canyon (not just from the WCNM boundary). (Comments on Proposed Action for FLEA, printed in DEIS for FLEA, August 2002, page 152.) The request has been reiterated by me many times. Honoring the request-at least as a "Desired Condition"-is long overdue.]

Response:

While the Forest Plan does not expressly apply a one mile buffer around Walnut Canyon, the impacts of roads on ecological and cultural resources is addressed by forestwide plan direction. See FW-RdsFac-DC-1 and 2, FW-RdsFac-G-1, FW-Hrtg-DC-1 and 2, and desired conditions for the various ecological resources on the Forest. Rather than impose a specific buffer that may be inadequate at times to protect these resources or is unnecessarily restrictive at other times, the revised Plan requires consideration of the impacts to these resources despite their exact proximity to the rim of Walnut Canyon. A guideline in the Walnut Canyon Management Area would require activities and uses on the forest be managed to protect cultural sites and to preserve habitat for disturbance-sensitive species both on the forest and within Walnut Canyon National Monument. See MA-Walnut-G-1. To ensure compatible management of overlapping resources, a management approach in the Walnut Canyon Management Area encourages coordination with the Monument.

Commenter: Barnett, Loyd

Comment:

Of the action items analyzed, I would recommend against adoption of the wilderness recommendations of Alternative C.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such

resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

In the Plan Proposal, Alternative B, three new areas are recommended for congressional wilderness designation - additions to the Strawberry Crater and Fossil Creek Wildernesses and a new Walker Mountain wilderness. I am not fully familiar with the first two; however, I believe that designation of the Walker Mountain area as a wilderness is not needed in order to continue to provide recreational settings that satisfy much of the primitive area demand. The background reports indicate that there are existing developed livestock waters and a need for some vegetation management. In the 2013 updated Wilderness Need Evaluation the only variable factor (i.e., the only one in which not all potential areas were rated high simply because of expected wilderness demand) was in underrepresented ecosystems due to 1715 acres of interior chaparral. I believe that if the percentage of interior chaparral within wilderness in its actual geographical range were calculated it would certainly be more than 3 percent. On the Coconino National Forest consider its presence in the Sycamore Canyon, Red Rock-Secret Mountain, Munds Mountain wildernesses. There are many thousands of acres of interior chaparral within wildernesses on the Tonto and Prescott National Forests. Comparing to the Southwest region wilderness land base which includes the Pecos Wilderness, Wheeler Peak Wilderness, Gila Wilderness, et al is unrealistic.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in

the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Barnett, Loyd

Comment:

Having been a recreational user of the Coconino National Forest for 40+ years - wood cutting, hunting, various forms of dispersed recreation - I am acutely aware of the exponential increase in public use and accompanying impacts on the land and its physical and biological resources. I am also aware of the continually constrained budgets compared to use and to the ever increasing conflicting demands by a myriad of users and user groups. However, the combination of the Travel Management Plan and this proposal have a cumulative effect that tends to impact motorized recreational users disproportionately to non-motorized. The term "under represented" is used to support recommendation for designation of specific areas as wilderness. However, my experience is that it now applies to opportunities for dispersed camping with a vehicle, due to the vast majority of Forest roads left open for travel but closed to camping. This results in reducing the opportunities for dispersion and relative degrees of solitude, even outside of weekends and peak periods. The soil and water specialist's report for that DEIS stated that there is very little damage from dispersed camping not located in or immediately adjacent to riparian areas and wetlands, but rather from indiscriminate ATV use emanating from the camps. This is an education and enforcement issue and the large majority of recreationists should not be punished because of the inappropriate actions of a minority.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate areas for motorized dispersed camping. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The Forest Plan contains a standard that acknowledges the motor vehicle use maps which are produced as part of the implementation of the Travel Management Rule. Camping corridors for motorized dispersed camping are identified on the motor vehicle use maps. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Comment:

As I stated in response to the DEIS for the Travel Management Plan (TMP) a few years ago, it is indeed unfortunate that Travel Management was not an integrated part of the Forest Plan and DEIS. Recognizing that it was perhaps more urgently pushed in order to implement sooner, incorporating a revision (if necessary) of the TMP would have provided another opportunity for the public to respond, considering the entire situation as it would affect them - and very possibly a faster response to public concerns after implementation began. At previous public meetings (e.g., Cornville Community Association in springs of 2012 and 2013) representatives of the Coconino National Forest made presentations and statements that were interpreted by members of the audience to mean that changes could be made based on public input as the plan was implemented, and that a new map would be issued each year. The implication was that changes could be implemented each year. They did not say that actual changes to the travel management rules could not be made without a new NEPA analysis and document (I learned this through an email response from Mike Dechter, in which he acknowledged the need for additional areas for dispersed camping in the pinyon-juniper woodland north of the San Francisco Peaks. However, he said that the NEPA for change would not start before 2014.)

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Comment:

The background reports do not identify any threats to the area that can only be alleviated by wilderness designation. I would recommend to continue to manage the area carefully to continue opportunities for the current type of recreation, but maintaining the options for vegetative management and mechanized maintenance of existing improvements.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

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Commenter: Bean, Tom

Comment:

My Comments about Guidelines for Watersheds, page 19 "To enhance the protection of human health and safety, watershed treatments such as vegetation thinning, prescribed burning, and channelization should be considered where protection of people, structures, and community infrastructure." To this list of actions aimed at watershed protection, I would add banning campfires every year during the season of greatest fire danger, May 1 to July 15th. The campfire ban would be calendar based not dependent of recent weather events in certain crucial watershed areas. The advantage of this policy is that it would be consistent policy year after year and thus far easier to the USFS to educate the public about. All signage and maps and other literature could contain this uniform message about campfire bans. This action would not necessary have to be applied uniformly across the entire Coconino NF, but could be used protect the watersheds in some Management Areas that were at highest risk from large scale high intensity wildfires. I would suggest the San Francisco Peaks, Fort Valley/Mt Elden, and Flagstaff Neighborwoods Management Areas. This would protect the Rio de Flag watershed, among others. A large fire in the upper portion of Rio de Flag Watershed could have catastrophic effects of City of Flagstaff, since this drainage winds though most of the city. The two most recent large fires in the San Francisco Peaks Management Area are the Schultz Fire, started on June 26, 2010 and the Leroux Fire started on June 11, 2001 Both fires where started by campfires that had been built while no campfire ban was in place. A "just say no to campfires" at this most dangerous time of year may well have prevented these expensive fires from getting started. The Walnut Canyon Management Area and the Oak Creek Management Areas are two more areas that because of steep canyon terrain would be very effected by a large wildfire during the usual fire season. A calendar based campfire ban could be a very important additional protection for these area. Campfires could still be allowed in fire grates designated campgrounds and picnic sites.

Response:

The Forest has an existing policy and process to address when to close the forest and ban campfires based on specific existing conditions. Although the Forest Plan does not repeat this policy nor does it provide a specific seasonal closure for campfires, it does contain a guideline requiring recreational activities to be managed to promote public health and safety. See FW-Rec-All-G-2. The existing policy and process are consistent with this guideline and can be viewed as an extension of this guideline.

Commenter: Bean, Tom

Comment:

General Description for Recommended Wilderness page 156 "The proposed action includes three recommended wilderness areas-Walker Mountain, Strawberry Crater (addition), and Davey's (addition to Fossil Springs Wilderness)-that, if selected in the final plan, would use the interim direction below until they are designated by congressional action." I support the recommended addition of these three areas as Wilderness Areas, and I would also like to see additional areas that scored higher in the Potential Wilderness Area report added to this list of potential new wilderness areas. I hoped that Hackberry Mountain and Barbershop Canyon would be among the Inventoried Roadless Areas that would continue to be managed like potential wilderness areas.

Response:

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availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Benally, Berta

Comment:

The plan has no reference to the new Sacred Sites Bill that was signed.

Response:

As a general rule, the Forest Plan includes references to applicable laws, regulations, policies and other information in Appendix D, Other Sources of Information. The Indian Sacred Sites Report has been added to the Heritage Resources, Tribal Relations, and Uses section in Appendix D of the Forest Plan. As noted in the Executive Summary, the Report does not, by itself, change policy or have any effects, significant or otherwise, on the human or natural environment and does not constitute final agency action. The Report is a review of law, policy, and procedures, with recommendations for changes based on Tribal consultation and public comments. Including the Report in Appendix D of the Forest Plan provides a reminder to forest managers that this Report is available as a resource when sacred sites are involve.

Commenter: Benally, Berta

Comment:

The plan only has vague references to MOUs with Tribal affiliates

Response:

The Coconino NF follows law, policy, guidance, and directives on communication and notification to tribes. These include the following, which have been added to Appendix D in the plan - Other Sources of Information: American Indian Religious Freedom Act (16 U.S.C. 1996), Archeological Resources Protection Act of 1979 (16 U.S.C. 470 aa-mm), National Historic Preservation Act (16 U.S.C. 470 et seq.) and regulations implementing Section 106 (36 CFR Part 800), , Native American Graves Protection and Repatriation Act (25 U.S.C. 3001, et. seq. and 43 CFR 10), National Environmental Policy Act Implementing Regulations (40 CFR Part 1501.2(d)(2)), Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2000), Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Feb. 11, 1994), Forest Service Manual 1560 and Forest Service Handbook 1509.13. Consultation with tribes and the importance of incorporating their perspectives, concerns, and traditional knowledge into management decisions is discussed in Tribal Relations and Uses section of the Forest Plan. For example, the Forest Plan acknowledges the special and unique government-to-government relationship (i.e., one sovereign nation to another) based on the U.S. Constitution, treaties, and statutes. See General Description and Background for the Tribal Relations and Uses section. Rather than attempt to unilaterally create a particular process to resolve disagreements with tribes through a plan component, the Forest Plan includes a management approach in the Tribal Relations and Uses section that suggests developing MOUs with tribes. It reminds forest managers to: Develop memorandums of understanding (MOUs) between the forest and those consulting American Indian tribes with which an MOU does not currently exist to guide consultation processes and reflect the tribes' particular perspectives and interests.

Commenter: Benally, Berta

Comment:

The Plan has no guidelines on NEPA or the wastewater issue on the San Francisco Peaks and the saturation contamination when the wastewater melt and runoff is exposed to the people, flora and fauna and animals

Response:

The Forest Plan does not authorize the use of reclaimed water for snowmaking or any other particular use. The Forest Plan establishes plan components that will guide decisions on projects and activities that are made after it is in effect. For example, the revised Forest Plan includes desired conditions for watersheds to be functioning properly and to exhibit high geomorphic, hydrologic, and biotic integrity within their inherent capability. See FW-Water-DC-1 and 2. A desired condition for the Alpine Tundra ERU seeks to maintain the attributes and processes that contribute to the ecological diversity and habitat for native biota in the ERU. See FW-TerrERU-AT-DC-1. New decisions on the use of reclaimed water for snowmaking will need to be consistent with these desired conditions and all of the other guidance in the Forest Plan. Past decisions are outside the scope of the plan. The effects of existing authorizations for snowmaking and use of reclaimed water on alpine tundra and the species and cultural values associated with alpine tundra were analyzed in the decision to authorize use of reclaimed water and snowmaking.

Commenter: Benally, Clayson

Comment:

Yet the Forest Service's new Revision does nothing to strengthen it's own polices such as the NEPA act. These policies are only a procedural process with no mechanisms to ensure there enforcement.[...]The National Environmental Policy Act was established to protect the health and well being of it's constituents.

Response:

Laws and regulations, and the enforcement of them, are not forest plan level decisions. Regulations and agency policy have already been created regarding implementation of NEPA and already guide the Forest. See 36 CFR Part 220 and FSH 1909.15 National Environmental Policy Act Handbook. Existing law, regulation, and policy are not being duplicated in the Plan. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect.

Commenter: Benally, Clayson

Comment:

The San Francisco Peaks where designated as a Traditional Cultural Properties TCP. Unfortunately there has been a delay in the completion of this process. This should be a priority in your new Revision.

Response:

The Traditional Cultural Properties process is outside the scope of forest plan revision. However, the San Francisco Peaks have been designated as a Traditional Cultural Property. The Forest Plan acknowledges this designation in the General Description and Background for the San Francisco Peaks Management Area.

Commenter: Benally, Clayson

Comment:

To my knowledge the White Vulcan Pumice Mine's lease was purchased by the Secretary of Interior Bruce Babibit, during the Clinton Administration. Yet they are still operational. There seems to be no accountability or enforcement. Please address this in your Revision.

Response:

No changes to the revised Plan have been made in response to this comment. The White Vulcan Mine began mining block pumice in the 1980s. In 2000, a settlement agreement was reached to with the mine owner/operator to close the mine. The mine owner/operator reclaimed the mine in 2010-2011, ending the mine's operation. The revised Plan includes plan components related to minerals and mining activities in the Minerals Resources section.

Commenter: Benally, Clayson

Comment:

There is no mention of updating or revising the 1872 mining act and it's outdated standards and deficiencies, within the Coconino National Forest or Nation wide.

Response:

Making changes to the 1872 Mining Act is outside the scope of the Forest Plan.

Comment:

Mt. Elden and Dry Lake Hills must be designated as its own management area with specific Standards, Suitability, Desired Conditions, and Monitoring due to the tremendous and unique recreational pressure on this specific area. o Mt Elden must be a specific designated management area because this is a rare mountain environment with a higher degree of natural diversity than the nearby San Francisco Peaks. Mt. Elden is immediately adjacent to Flagstaff and is currently environmentally threatened due to recreational pressure. As stated in your USFS Coconino National Forest Plan numerous times (e.g. see Chap 1 of Draft Plan) - this forest is subject to significant impacts from climate change, increasing population growth, increasing recreational demand, increasing recreational conflicts, new types of recreation demands, and increasing pressure on forest resources. o The Mt. Elden and Dry Lake Hills area is a rare and diverse mountain resource immediately adjacent to Flagstaff - it should be considered a WILDERNESS AREA; however at the least it should be its own management area AND a non- motorized area. For Example: Other key mountain resources that are similar to Mt. Elden, e.g. Mt. Humphrey and Kendrick have WILDERNESS areas in a USFS attempt to protect their resources. All other mountain resources are miles away from Flagstaff and not nearly as accessible. Consequently, the nearby community uses the Mt. Elden area more than other mountain areas near Flagstaff. In addition, increasingly larger populations from metropolitan cities of Arizona flock to Mt Elden to get away from the increasingly hot desert climate in surrounding Arizona. Phoenix's population growth is projected to increase at a rate three times greater than the rest of the U.S. Mt. Elden's recreational use is also increasing beyond environmental capacity due to Flagstaff's increasing population, especially due to the growing population of NAU students (projected NAU growth by 2015 = 25,000 local students). Phoenix These combined factors place Mt. Elden in environmental danger and actions must be taken to preserve and sustain this precious mountain resource. o The Coconino Forest managers have been advised and should already be aware from their own investigations that Mt. Elden is suffering from increasing serious and negative impacts from recreation overuse, illegal trail building activities, improper road use, unsafe motorized and downhill "gravity rider" activities, large volume of recreationists, and recreationist conflicts on road and trails. o Please follow your stated purpose for this plan to promote responsible land management for the Coconino and fulfill your responsibility for the stewardship of the forest to best meet the needs of the American people.

Response:

The Mount Elden area was considered for wilderness designation as part of the wilderness evaluation process the Forest conducted for the forest plan revision effort. The Mount Elden area was screened out during the inventory step of the evaluation. After boundary adjustments were made for private land, communication towers, Forest Service lookout tower, utility corridors, other special use permits, and associated roads, the area no longer met the 5,000 acre criteria for potential wilderness areas. It was removed from further consideration at that time. The Mount Elden Management Area has not been assigned Recreation Opportunity Spectrum (ROS) settings of primitive or semi-primitive non-motorized as suggested. The ROS settings for alternatives B, C and D were mapped using a raster-based GIS approach which incorporated and elaborated on agency protocols established in 2003. Through the use of map algebra, naturalness, access, remoteness, facilities and site management were incorporated to identify the spatial arrangement of recreational opportunities and ROS classes throughout the Forest. The results of this modeling reflect that less than 10 percent of the management area should have an ROS class of semi-primitive non-motorized and none of the management area should have an ROS class of primitive. There is no sound rationale to adopt the commenters suggestion and to do so would create a situation where many existing uses in the area are inconsistent with the ROS class for the area.

Commenter: Benenati, Emma

Comment:

Gravity Riding" or steep downhill mountain biking should occur in an area where it can be transparent (as opposed to the current illegal and covert activities), sustainable, continuously managed and controlled, mitigated, monitored, evaluated, and fees can be collected by the Forest Service or a contracted concession. A prime location example is Snowbowl or Wing Mountain where commercial activities already exist. The primitive and pristine setting of Mt. Elden is NOT the place for this destructive and illegal activity to occur.

Response:

The Forest Plan provides the framework that would guide site-specific consideration of this activity. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. The Forest Plan also has guidance on user conflicts. See FW-Rec-All-G-2. Whether this activity is impacting desired conditions in a particular area and how to manage this activity is a site-specific decision. The identification of specific prohibitions on mechanized travel would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212). For these reasons, a standard has not been added in response to these comments. Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. The level of Forest Service law enforcement is dependent on staffing, which is reflective of the budget allocated to the Forest Service from Congress.

Commenter: Benenati, Emma

Comment:

The Coconino National Forest states that your funding is flat or may even be decreased (also see Recreation Specialists Report). Based on the Coconino NF past non-transparent and unethical collaborations with certain special interest groups who have self-serving agendas to trade for USFS trail volunteer work - for example: Flagstaff Biking Organization (FBO), Absolute Bike Shop, International Mountain Biking Association (IMBA), "FBO Flagstaff Gravity Riders", and your use of FBO's numerous "Volunteer Trail Building & Repair Days" where FBO and Gravity Riders have gained favor with the Coconino NF by "donating" trail work - thus it is suggested that you keep your proposed actions within your Coconino NF Resource Management Plan to a cost level that allows you to DO YOUR OWN TRAIL WORK or pay an outside, objective vender to do it. If you cannot afford it, then don't propose to build new trails and engage in unethical and perceived collusion with a special interest group.

Response:

No change has been made in response to this comment. An underlying implication of this comment is that the use of volunteers on a trails project indicates that the action is only beneficial to the volunteers and may be contrary to sound forest management. Trails projects, like all projects, must be designed to be consistent with the plan components in the Forest Plan and laws, regulations, and policies. Who provides the labor for implementing these projects, whether by Forest Service employees, contractors, volunteers, or a combination of these resources, should have no bearing on whether project is meeting its intended purpose and is consistent with the Forest Plan and laws, regulations, and policies. Relying upon, and making opportunities available for, volunteers is an important component of the Forest Plan as indicated by the numerous references to volunteers and volunteerism throughout the Forest Plan. Volunteer efforts support critical programs on the Forest and foster a sense of stewardship for the Forest.

Commenter: Benenati, Emma

Comment:

As it is written now, statements in the entire forest PLAN are vague and lacking in specific meaning and details. The USFS must change this PLAN and add specific details, exact plans of action, metrics for desired future conditions, metrics for monitoring, metrics for enforcement of regulations, and metrics to measure how you plan to follow your statements to "promote responsible land management for the Coconino and fulfill the USFS responsibility for the stewardship of the forest to best meet the needs of the American people".

Response:

The Forest Plan is, by design, strategic in nature. It focuses on desired conditions that are described in qualitative and quantitative terms. The Forest Plan sets forth objectives that are measurable, anticipated results that help achieve or move towards desired conditions over the life of the Forest Plan. The specific details on how projects will be designed and conducted will be established as projects are developed, taking site-specific information into account to ensure that the project maintains or moves the forest towards the desired conditions in the Forest Plan. Monitoring to determine the effectiveness of the Forest Plan is discussed in the Monitoring Strategy in Chapter 5 of the Forest Plan. The Monitoring Plan has been reviewed and adjusted to ensure that each monitoring question identifies the metrics that will be used to help answer the monitoring question.

Commenter: Benenati, Emma

Comment:

STANDARD - Gravity Riding should be prohibited and enforced by USFS in the entire Mt. Elden area. PLEASE SEE the journal article that documents the growing abuse of our public lands by gravity riders and other public land abusers who use these lands as a large gymnasium for the sole purpose of adrenaline thrills: Shelley Burgin & Nigel Hardiman (2012): Extreme sports in natural areas: looming disaster or a catalyst for a paradigm shift in land use planning? Journal of Environmental Planning and Management pp1-20. DOI:10.1080/09640568.2011.634228. To link to this article: <http://dx.doi.org/10.1080/09640568.2011.634228>

Response:

The Forest Plan provides the framework that would guide site-specific consideration of this activity. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. The Forest Plan also has guidance on user conflicts. See FW-Rec-All-G-2. Whether this activity is impacting desired conditions in a particular area and how to manage this activity is a site-specific decision. The identification of specific prohibitions on mechanized travel would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212). For these reasons, a standard has not been added in response to these comments. Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. The level of Forest Service law enforcement is dependent on staffing, which is reflective of the budget allocated to the Forest Service from Congress.

Commenter: Benenati, Emma

Comment:

The Coconino National Forest has stated and it is widely known the Coconino National Forest is negatively impacted by population growth and increasing demand on the forest. The Coconino National Forest is currently experiencing negative changes in forest use due to increasing safety issues from increasing users on roads and trails, increasing user conflicts due to conflicting and/or unsafe activities on roads and trails, and increasing illegal activities e.g. illegal downhill or "gravity" trail building and activity resulting in further conflicts and unsafe conditions. These illegal activities must be stopped by the USFS, and the USFS must enforce its existing regulations against any such activities. Illegal downhill (or "Gravity rider") trails must be obliterated.

Response:

The Forest Plan provides the framework that would guide site-specific consideration of this activity. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. The Forest Plan also has guidance on user conflicts. See FW-Rec-All-G-2. Whether this activity is impacting desired conditions in a particular area and how to manage this activity is a site-specific decision. The identification of specific prohibitions on mechanized travel would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212). For these reasons, a standard has not been added in response to these comments. Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. The level of Forest Service law enforcement is dependent on staffing, which is reflective of the budget allocated to the Forest Service from Congress.

Commenter: Benenati, Emma

Comment:

You should use your remaining limited funds to police our Coconino National Forest and enforce your own existing regulations.

Response:

No change to the plan has been made in response to this comment. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect.

Comment:

Add Mt. Elden and Dry Lake Hills areas to be designated as non-motorized areas from their gates and beyond - STANDARD o Close the gates on both Mt. Elden and Shultz Pass Roads at the bottom of the roads (e.g. at the current existing gates) o Mt Elden (and Shultz Pass - see below) are currently being abused and dominated by motorized vehicles repeatedly shuttling "gravity riders" (e.g. 10 - 15 round trips in a few hours) and their heavy downhill bicycles to the top of Mt Elden trailheads. Gravity Rider shuttles are an improper and unsafe use of Mt Elden Rd that negatively impacts all other recreationists using Mt. Elden Rd. Gravity Riders also are causing unsafe and negative interactions on all the trails (illegal and legal) they blast down at unsafe speeds and with no concern for any other trail users. o These gate closures will preserve these mentioned areas while allowing for sustainable and diverse uses of the Coconino forest in the best interest of the majority of the recreationists instead of a select group of motorized users who abuse these roads and disturb all other recreationists by using Mt Elden and Shultz Pass roads as repeated motorized shuttle routes to repeatedly access trails, of which a number are illegal, at the top of Mt. Elden or the top of Shultz Pass. o These gate closures are critical to preserving the diverse resources and rare mountain environments immediately adjacent to Flagstaff. As stated in your USFS Coconino National Forest Plan numerous times (e.g. see Chap 1 of Draft Plan) - this forest is subject to significant impacts from climate change, increasing population growth, increasing recreational demand, increasing recreational conflicts, new types of recreation demands, and increasing pressure on forest resources. Please follow your stated purpose for this plan to promote responsible land management for the Coconino and fulfill your responsibility for the stewardship of the forest to best meet the needs of the American people. o Mt Elden's motorized access needs to STOP at the existing gate at the bottom of Mt Elden Rd, closing off the remaining road to the top of Mt Elden. o Authorized administrative vehicles only will be allowed access on Mt Elden Rd. o Shultz Pass Road motorized access will STOP at the existing western gate "A" at the bottom of Shultz Pass road near the "Y" area off Highway 180, thus closing the next ~54.5 miles to motorized travel [except for authorized administrative vehicles]. o These two Shultz Pass gate closures ("A" & "B") would be beneficial because they would allow motorized access for various legal recreationists from Highway 180 only to the "Y" Parking area closure gate, and also motorized access from Highway 89 up to the closure gate at Shultz Pass, but would prevent current motorized travel abuse by downhill or "gravity rider" shuttle vehicles. "Gravity riders" and their bicycles are repeatedly shuttled on the ~4.5 miles between the "Y" Parking area and Shultz Pass to access the high elevation trailheads without having to ride their bicycles uphill. This ~4.5 miles between the "Y" and Shultz pass are most abused because this is the closet access from Flagstaff, aside from Mt. Elden Rd. It is highly unlikely that Gravity Rider shuttles would make the long trip around Flagstaff and up the longer east road to access Shultz Pass from Highway 89; However, many hiking, equestrian, nature watcher recreationists would drive that far to enjoy the forest. o At the top of Shultz Pass another gate "B" should close off motorized travel from the east ((e.g. vehicles coming from the eastern approach off Highway 89). o Establish parking areas near these three gate closures (at the gate at the bottom of Mt Elden Rd; at the gate at the bottom of Shultz Pass road; and at the gate at the top of Shultz Pass). These gate closures and parking areas would also allow access for various recreationists who want to drive to these gates for hiker/cyclist/equestrian recreation activities.

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions such as permitting or prohibiting occupancy, use or access. However, the Forest Plan does include direction related to recreational access and user conflicts that will guide project and activity decisions in the future. For example, plan components related to recreational access can be found in FW-Rec-All-DC-2 and 4 and FW-RdsFac-DC-1. Plan components related to user conflicts can be found in FW-Rec-All-DC-4 and 6 and FW-Rec-All-G-2. Decisions to close or restrict access on the Coconino National Forest are determined during travel management planning. Public access determined by this process is guided by the motor vehicle use map. As part of this process, we identify the road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands.

Commenter: Bondurant, Evert

Comment:

Someone is still confusing readers of the document with pronghorn and antelope.

Response:

The Forest Plan and the environmental impact statement have been adjusted in response to this comment. All references to "antelope" have been replaced with "pronghorn."

Commenter: Bondurant, Evert

Comment:

Mechanically restore/enhance 3,500 acres... every 10 years becomes 35,000 acres a year out of the existing habitat of 89,683 acres Mechanically restore/enhance 10,800 to 12,400 acres ... every 10 years becomes 108,000 to 124,000 out of the existing habitat of 92,913 acres. This indicates that in each 10 year period you will mechanically restore/enhance more than the entire habitat. This seems a bit excessive and I was unable to find the rationale behind restoring or enhancing the entire habitat every 10 years within the documents. Please add the reference that explains why the entire habitat must be restored/enhanced in less than 10 years and continuing during the life of the plan. Mechanically restore/enhance 7,600 to 11,400 acre... every 10 years becomes 76,000 to 114,000 acres out of the existing habitat of 23,429 acres. This indicates that in each 10 year period you will mechanically restore/enhance the entire habitat 3 to 5 times. Please add the reference that explains why the entire habitat must be restored/enhanced every 3 to 5 and continuing during the life of the plan.

Response:

The Forest Plan has been adjusted in response to this comment. As worded, it was possible to interpret the objective to mean that the acres listed would be treated annually, not spread out over 10 years. The objectives have been adjusted to clarify that acres of treatment would occur during each 10 year period over the life of the plan, not annually for 10 years. See FW-TerrERU-Grass-1, 2, and 3, FW-TerrERU-PJ-O-1, 2, and 3, FW-TerrERU-AspMpl-O-1, FW-TerrERU-PP-1, 2, and 3, and FW-TerrERU-MC-MCFF-O-1, 2, and 3.

Commenter: Bondurant, Evert

Comment:

Therefore I recommend you stop mechanical juniper removal and put the money into fire removal.

Response:

No change has been made in response to this comment. Decisions to treat, and how to treat, pinyon juniper are based on site specific analysis and made at the project level. Fire or fuelwooding may be effective treatments in some cases but perhaps not all. The Forest Plan provides the framework for projects to select the most effective treatment to move towards desired conditions. For example, pinyon seedling survival is promoted in a desired condition. See FW-TerrERU-DC-PJ-15. Management approaches in the Forest Products section (where fuelwood is addressed) remind forest managers to promote the use of forest products as a result of forest management activities and encourage use of forest products in lieu of onsite burning or chipping.

Commenter: Bondurant, evert

Comment:

A pronghorn is a pronghorn is a pronghorn and that is how it should be in your document even if your specialists use different words.

Response:

The Forest Plan and the environmental impact statement have been adjusted in response to this comment. All references to "antelope" have been replaced with "pronghorn."

Commenter: Bondurant, Evert

Comment:

I was unaware that antelope had been imported into Arizona and let loose in the forest.

Response:

The Forest Plan and the environmental impact statement have been adjusted in response to this comment. All references to "antelope" have been replaced with "pronghorn."

Commenter: Bondurant, evert

Comment:

The Draft Land and Resource Management Plan for the Coconino NF completely ignores the long term recommendations of the DEIS and opts for mechanical tree removal. The information from your DEIS documents indicates that the only way to regain sustainability and integrity of the system is to burn the areas that juniper are undesirable. Sadly, a couple of years ago there was a natural fire burning from west and south of Quail Hill to the east and north and you stopped the fire at State Highway 87 instead of allowing it to burn into the same area you want to accomplish mechanical removal. Stopping this fire was a bad decision on your part since it was a natural occurring fire and it would help bring juniper under control in the grasslands. Without getting out of your vehicle you can see the fuel mess left in the forest after mechanical tree removal by driving on Lake Mary Road (A.K.A FH-3) from just North of the Happy Jack Lodge to the intersection with State Route 87. Soon the entire Lake Mary Road will look the same from the Southern Mormon Lake turnoff to State Highway 87. Therefore I recommend you change the Draft Land and Resource Management Plan to state that fire is the only method to be used.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan is programmatic in nature and does not make decisions on specific mechanical treatment techniques to be employed in specific situations. Decisions to treat, and how to treat, pinyon juniper will be based on site specific analysis and made at the project level. Prescribed fire or fuelwooding may be an effective treatment in some cases but not others. The Forest Plan provides the framework for projects to select the most effective treatment (mechanical, prescribed fire, or a combination of the two) to move towards desired conditions for the various ERUs. A management approach in the All Terrestrial ERU section reminds forest managers: Fire is essential for ecosystem function and for maintaining or moving towards desired conditions in ecosystems where fire is the primary natural disturbance. Primary natural disturbances in Desert Communities, Alpine Tundra, and riparian areas do not include fire, but rather include flooding, precipitation, temperature, wind, avalanches, and ultraviolet radiation. When used as a tool, fire can effectively restore forest structure when used alone or when combined with mechanical treatments. Mechanical treatments may be costly, so the capacity to implement such treatments across the landscape may be limited. Strategic placement and design of mechanical treatments increases their effectiveness in protecting values at risk. Another management approach for Forest Products (where fuelwood is addressed) reminds forest managers to promote the use of forest products as a result of forest management activities and encourages use of forest products in lieu of onsite burning or chipping.

Commenter: Bondurant, evert

Comment:

Stopping mechanical Pinyon-juniper removal in the grasslands North of Blue Ridge and East and West of State highway 87 can save money that can be put into fire removal of the Pinyon-juniper.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan is programmatic in nature and does not make decisions on specific mechanical treatment techniques to be employed in specific situations. Decisions to treat, and how to treat, pinyon juniper will be based on site specific analysis and made at the project level. Prescribed fire or fuelwooding may be an effective treatment in some cases but not others. The Forest Plan provides the framework for projects to select the most effective treatment (mechanical, prescribed fire, or a combination of the two) to move towards desired conditions for the various ERUs. A management approach in the All Terrestrial ERU section reminds forest managers: Fire is essential for ecosystem function and for maintaining or moving towards desired conditions in ecosystems where fire is the primary natural disturbance. Primary natural disturbances in Desert Communities, Alpine Tundra, and riparian areas do not include fire, but rather include flooding, precipitation, temperature, wind, avalanches, and ultraviolet radiation. When used as a tool, fire can effectively restore forest structure when used alone or when combined with mechanical treatments. Mechanical treatments may be costly, so the capacity to implement such treatments across the landscape may be limited. Strategic placement and design of mechanical treatments increases their effectiveness in protecting values at risk. Another management approach for Forest Products (where fuelwood is addressed) reminds forest managers to promote the use of forest products as a result of forest management activities and encourages use of forest products in lieu of onsite burning or chipping.

Commenter: Bondurant, evert

Comment:

Before you start nominating any Coconino National Forest stream, East Clear Creek, Barbershop, etc for wilderness area inclusion you need to identify the invasive species in the area and the impacts and how to eradicate the invasive species.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Bowser, Jim

Comment:

The Lake Montezuma Property Owners Association would like to add an additional comment before the review period ends. We support Bill Stafford's request for a Beaver Creek Management Area. This addition to the proposed plan would help address the needs of the forest and the needs of the residents in this area. As representatives of the local community, we would like to help provide the recreational opportunities that are not available at this time and may never be if our area is not recognized for management area status.

Response:

A separate Beaver Creek Management Area has not been added to the revised Plan. The Beaver Creek area is still included within the Verde Valley Management Area. Although a separate management area was not created for the Beaver Creek area, the language suggested for the new management area was reviewed and incorporated whenever appropriate into the Verde Valley Management Area. See MA-VerdeV-DC-1, 2, 3, and 4, MA-VerdeV-G-1, 2, and 3, and the following management approaches: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Boyle, Michael

Comment:

Your analysis has not adequately addressed the negative impacts of helicopters for air tours in your affected environment. Helicopters are not part of the "natural-appearing scenery" on the Coconino National Forest and should be considered a negative impact on visitors, their experience, and on wildlife resources. Please provide an analysis of helicopter use in wilderness areas and below the Mogollon Rim in the Sedona Oak Creek area.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Boyle, Michael

Comment:

The Draft EIS does not adequately address these negative impacts to the visitor experience, solitude, wilderness character, and wildlife from helicopters. These tourist vehicles regularly fly below the Mogollon Rim and barely above the tree tops. One of the worst areas is the Marg's Draw area that is designated Wilderness in the CCFNF. There is little solitude in this area and the visitor experience is ruined by low flying helicopters. The USFS should address this issue in their impact analysis.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Brady, Ann

Comment:

My family and I were fortunate enough to visit Arizona's amazing Red Rock country this past summer. We were stunned and amazed by the absolute majesty of Coconino. Please protect Coconino so my daughters can return their someday with their own children.

Response:

The Forest Plan contributes to ecological, social, and economic sustainability focused on meeting the needs of the present generation without compromising the ability of future generations to meet their needs. The Forest Plan gives direction to manage the forest consistent with the Multiple Use-Sustained Yield Act of 1960 and provides goods and services including outdoor recreation, timber, range, watershed, wildlife, and fish. Forest plan direction applies to activities and uses on forest-administered lands, not privately owned lands. The Scenery Resources section has desired conditions, standards, guidelines, and objectives that are intended to maintain or improve scenic integrity objectives. This section also points to the Landscape Character Description document (see Appendix D in the plan) which has information on the desired conditions associated with different landscapes on the forest.

Commenter: Britt, Tom

Comment:

I do not support alt C. It is in fact not a wildlife habitat alternative but merely an alt. to restrict use of the area by forest visitors. Had such restrictions imposed by alt C been effective, the Wildlife Refuge System developed by the Arizona Game and Fish Dept. in cooperation with the US Forest Service in the 1930s-40s would have proven it a valuable technique. I suggest you review the study conducted in the Pine Mtn. area by the CNF and the Rocky Mtn. Station that evaluated ungulate use in a vehicle access restricted area and an adjacent open area. This study was conducted in the early 1970s.

Response:

No change has been made in the Forest Plan in response to comment. The management areas in Alternative C that were designed to managed to have more primitive and natural settings with reduced human-related disturbance have not been included in the Forest Plan. These management areas have been retained in Alternative C. They have been included in that alternative to respond to concerns that the forest plan revision effort needed to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance . Including these management areas in Alternative C provided the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Britt, Tom

Comment:

Based on both documents it is apparent the CNF plans to close an additional 200 plus miles of roads under the auspices of the "to be" selected alternative. I strongly advocate this road closure process be incorporated in the TMR/TMP process. I believe the public should have input in the closing of specific roads and an opportunity to comment on proposed closures.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: Britt, Tom

Comment:

I can support the Desired Conditions noted in Attachment B but feel the process to reach them may result in the CNF moving away from multiple use to single use management (restoration). I feel the Desired Condition Goals should be re-examined. I fear the goals may become barriers to wildlife habitat enhancement projects; especially in small scale areas. For example the operation and maintenance of a wildlife water may become a conflict to restoration of vegetation on a site such as a small stand of low elevation aspen.

Response:

Project-specific analyses are conducted for all projects planned on the Forest. Balancing management concerns for aspen (see FW-TerrERU-AspMpl-DC-1, 2, and 3), wildlife habitat (FW-WFP-DC-1, 2, and 3), and wildlife waters (FW-ConstWat-DC-1) occur at the project-level using site specific information.

Commenter: Britt, Tom

Comment:

I am also troubled by FW-Tvas-dc-11. The elk present on the CNF today are believed to be a different subspecies of what occurred on the CNF in the pre settlement era. They most certainly resemble the elk that were here previously. As such I do not believe elk should be named in this statement.

Response:

The desired condition has been adjusted in response to these comments. Elk are no longer referenced as a desirable nonnative species and are no longer mentioned in the Invasive Species section. See FW-Invas-DC-1.

Comment:

I do not support the addition of any new wilderness areas (WA) as proposed in alt B and C. All of the proposed areas can be managed under existing prescriptions to achieve the wilderness values without WA designations. WA designation impedes forest management and wildlife management. If these areas require an additional layer of management regulations, I suggest using the "quiet areas" status referred to in the documents. Any permanent restriction of access makes achievement of big game harvest goals difficult, hinders operation and maintenance of habitat improvements as well as denying many recreation users the opportunity to access the area.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for

determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Britt, Tom

Comment:

I strongly support keeping the CNF open to recreational shooting (I do not support implementation of Alternative (alt.) C). I recognize as more of the urban-wild land interface becomes residential, adjustments will be required. I hope these adjustments will not be driven by a few who feel recreational shooting should be banned from the CNF. I also urge that existing suitable sites such as material pits remain open as to provide safe venues for such activities. The Arizona Game and Fish Dept. is hosting a meeting in April, 2014 to begin the process of encouraging recreational shooters to become better stewards of their public land shooting areas. I hope the US Forest Service will become a partner to this program.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Britt, Tom

Comment:

I do not support alt B with the proposed WAs. Please refer to my earlier comments about WA. I urge you to replace the WA proposal in alt B with that of alt D if alt B becomes the selected alternative.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Britt, Tom

Comment:

In FW-Rec-Disp-DC Camping 13 a constraint of "overcrowding" is placed on dispersed camping areas as a trigger to regulate use. Overcrowding is not defined and is probably best defined by the occupants. I suggest overcrowding be deleted to prevent it from becoming an undefined metric. The desired condition of soil and vegetation may better define overcrowding when coupled with recognition of length of time of occupancy.

Response:

The sentence referencing over-crowding has been deleted as suggested for several reasons. The direction now recognizes a range of dispersed camping opportunities that is not constrained by an undefined lower density of users. See FW-Rec-Disp-DC-4. Furthermore, the desire for natural character as part of dispersed recreation is already addressed in another desired condition. See FW-Rec-Disp-DC-3.

Commenter: Britt, Tom

Comment:

The CNF should continue to be managed under the doctrine of multiple use. The LMRP seems to be driving the CNF towards a more preservation model of management. The key theme of restoration may not be applicable to many areas and uses. Likewise it can be abstract in terms of definition. Such a definition may pose hardships on those dependent on the CNF for their livelihoods and for recreation.

Response:

The Forest Plan is designed to contribute to ecological, social, and economic sustainability focused on meeting the needs of the present generation without compromising the ability of future generations to meet their needs. The Forest Plan gives direction to manage the forest consistent with the Multiple Use-Sustained Yield Act of 1960 and provides goods and services including outdoor recreation, timber, range, watershed, wildlife, and fish. This revision was conducted under the legal framework of the National Forest Management Act, and the provisions of the 1982 Planning Rule, as allowed by the 2012 Planning Rule language (36 CFR 219.7(b)(3)). Management of national forests is jointly based on the principles of conservation and multiple use. Multiple uses are not prioritized and are consistent with desired conditions for plan resource areas and were considered in the effects analyses. The Multiple Use-Sustained-Yield Act of 1960 (section 1) states that, "the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." The National Forest Management Act (section 6(e)(1)) states that in revising plans, "provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use, Sustained-Yield Act of 1960, and in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness..."

Commenter: Britt, Tom

Comment:

In FN- Wfp-Dc1 (pp 72-73) the last sentence seems to indicate all human made habitat alterations may be removed from the CNF in time. I hope this is in reference to non permanent structures. I request this be re-written so as to define what is to be removed.

Response:

This desired condition has been adjusted in response to the comments. One of the purposes of the component is to recognize that human-made or altered habitats may be needed to support species populations or meet long term population goals. The desired condition has been adjusted to clarify this purpose. See FW-WFP-DC-8.

Commenter: Buttles, Kathryn

Comment:

I live in Sedona and agree 100% with this letter. I am more and more dismayed day by day at what is being allowed here. I moved back here (again) 4 yrs ago and noticed there isn't nearly the amount of birds - I used to hear their sweet songs and now it is very seldom that I hear them. What I do hear is the roar of planes, ATVs, jeeps, people, noise, traffic and the constant sirens of firefighters having to go out to rescue people who do not or will not obey common safety practices in the forest or on the roads. We do not need more trails, bike paths, etc. Every time one of us complains the response is,... The bike ride, the this or that brings in xxxxx (fill in yourself).. Most people moved here for the QUIET, less traffic and most of all, for the great beauty that is here. Please do not allow the Coconino Nat. Forest to be destroyed

Response:

A plan component related to this concept has been adjusted to have forestwide application and to expressly mention the desire for natural soundscapes that are consistent with ROS objectives. See FW-Rec-All DC-10.

Commenter: Canaca, Laura

Comment:

b. Throughout the LRMP and EIS, the Forest Service should take a more comprehensive approach to these closely-linked activities and should analyze associated economic impacts to communities and wildlife conservation

Response:

The Forest Plan has not been adjusted in response to this comment. The glossary in the Forest Plan defines dispersed recreation in conjunction with roads, trails, and undeveloped waterways, including hunting and fishing. The Forest Plan ties motorized use with big game retrieval in standards in the Dispersed Recreation and Roads and Facilities sections, where the Motorized Vehicle Use Map is referenced. See FW-Rec-Disp-S-1 and FW-RdsFac-S-1. This map is associated with the Travel Management Rule. The environmental analyses associated with the Travel Management Rule, and subsequent updates to the map, are the primary vehicle for addressing motorized use. The Forest Plan takes a more strategic approach to hunting, fishing, and motorized use. For example, it describes a broad range of recreational opportunities being available on the Forest and has a desired condition that wildlife-based recreation occurs in a variety of settings from primitive to developed. See FW-Rec-All-DC-2 and 8.

Commenter: Canaca, Laura

Comment:

48 LRMP: o 103 FW-Rec-Disp-DC Motorized Recreation #4 Statement needs to acknowledge importance of motorized travel for wildlife management, wildlife associated recreation, and associated benefits. In many places on the CNF, road closures will directly affect the Department's ability to meet harvest objectives in difficult to reach areas of the forest. Recommendations: a. Add hunting, angling, and big-game retrieval to list of activities.

Response:

The Dispersed Recreation section has been adjusted in response to this comment. Hunting, fishing, and motorized vehicle recreation are listed as some of the more common dispersed recreation activities on the Forest in the General Description and Background section for Dispersed Recreation. Furthermore, a desired condition in Roads and Facilities describes the forest transportation system and specifically mentions wildlife management. FW-RdsFac-DC-1 states: The transportation system (roads) provides reasonable motorized access to the public, city, county, state, and other federal entities for permissible uses such as recreation, fire management, wildlife management and access to infrastructure or neighboring land. The transportation system expands and contracts commensurate with use and needs, and it balances the desire for access with management activities and ecological impacts. An economical system of sustainable, well maintained, and marked roads provides diverse opportunities to explore the forest while protecting watershed conditions, recreation opportunities, scenery, heritage resources, rare plants, fisheries, and wildlife habitat and movement.

Commenter: Canaca, Laura

Comment:

b. Add DC: "Motorized access accounts for the needs of wildlife management, the economy, and interests of affected governments and private businesses of cooperation with the Arizona Game and Fish Department, County Government and representatives from a broad array of recreational and multiple use user groups."

Response:

The Forest Plan has been adjusted to address the concerns in this comment. The desired condition regarding the Forest's transportation system has been expanded to recognize the various users that need motorized access on the Forest (including city, county, state, and other federal entities) and some of the reasons that they need motorized access (including wildlife management). See RW-RdsFac-DC-1.

Commenter: Canaca, Laura

Comment:

c. Add DC: "Road densities are developed and managed to ensure reasonable and sufficient recreational and multiple use access to accommodate a wide array of uses and users."

Response:

One of the proposed desired conditions was modified to address this comment. The changes do not particular emphasize road densities. Specifying road densities is an alternative that was not carried forward for detailed consideration because road impacts are more complex than a simple road density calculation. See the Alternatives Eliminated from Detailed Study section in Chapter 2 of the FEIS for additional information. Rather, the modification to the desired condition focuses on the effectiveness of the transportation system to provide access for a wide variety of needs while protecting other forest resources. See FW-RdsFac-DC-1.

Commenter: Canaca, Laura

Comment:

49 LRMP: p 104 FW-Rec-Disp-DC Motorized Recreation #5 The Department has previously noted issues of inadequate signage in the Cinder Hills OHV area. Recommendation: a. Add signage guideline for this area.

Response:

The Forest Plan has been adjusted in response to this comment. A guideline has been added to the Dispersed Recreation section requiring all designated areas and routes, boundaries and routes to be clearly and uniformly identified. See FW-Rec-Disp-G-1. The guideline was not focused on the Cinder Hills OHV area because motorized use outside of designated areas or routes could be problematic anywhere on the Forest. The Forest Plan continues to make clear identification of the boundaries of the Cinder Hills Off-Highway Vehicle Area a desired condition. See MA-VolcanWD-DC-3.

Commenter: Canaca, Laura

Comment:

51 LRMP: p 105 FW-Rec-Disp-DC Water-Based Recreation #19 "Angling opportunities are available at remote sites, with a semiprimitive or primitive character and in a natural setting." Unnecessarily narrow statement. Angling occurs in a variety of settings, not just those listed here. Recommendation: a. Broaden appropriately.

Response:

The Forest Plan has been adjusted in response to this comment. This plan component has been adjusted to increase its scope and to have more strategic application by referring to wildlife based recreation and a variety of settings. See FW-Rec-All-DC-8.

Comment:

46 LRMP: p 92 FW-Rds-Fac-0 "Naturalize or decommission 200 to 800 miles of unauthorized roads and system roads to create a more cost effective road system and to restore natural resources impacted by roads during the 10 years following plan approval". It is unclear to the Department what relationship this Objective has with the Coconino NF's recently adopted Travel Management Plan (September 2011) in which the Coconino adopted a motor vehicle use map of roads, trails and areas designated for motor vehicle use to address impacts to natural and cultural resources created by increased motor vehicle use. The DEIS at 671 notes that under Alternatives B,C, and D, between "200 and 800 miles of public and administrative roads could be closed, decommissioned, or obliterated and naturalized" in areas with more primitive ROS designations; in "wildlife habitat management areas" to protect sensitive wildlife and watershed conditions, and in recommended wilderness areas and other special areas. Closure of roads to vehicular use must be done under the annual review of the TMP. Doing so in the LRMP is disingenuous and contrary to good public policy as the cumulative impacts to forest users are not disclosed. While the Department concurs with the statement on page 672 of the DEIS that "[a]ny mitigation of habitat fragmentation or modifications to NFS roads would be developed through a cooperative effort of Arizona Game and Fish Department and Forest Service on a site-specific basis and would apply under all alternatives", the DEIS text and Proposed Plan should clarify that any further proposed road closures or restricted motorized access on the Coconino NF will be conducted as a revision to the Coconino TMP, with full disclosure to, and participation by the Department and the public. See the Department's Comment No. 62 below on "wildlife habitat management areas" [WHMAs]. The Department questions the Objective of a "more cost effective" road system as justification for excluding the public from motorized access to additional areas within the Coconino NF. The Arizona Game and Fish Commission Policy asserts that every citizen should have access to their multiple-use lands unless there are reasons to deny access founded in sound science and affirmative analysis, and not a presumption of harm. As written, the Objective sets an arbitrary and possibly pre-decisional target that fails to identify to the public the analysis or justification for closure of several hundred more miles of roads. The LRMP and DEIS contain inconsistent information and contradictory direction. Numbers in the Objective do not match those presented in the Alternatives Comparison Table (EIS Vol 1: Table 1 #11). The stated Objective is inconsistent with the following statement in EIS Vol 2: p 671: "Under alternatives B, C, and D, the objective specifies that between 200 and 800 miles (FW-RdsFac-0-1) of public and administrative roads could [emphasis added] be closed, decommissioned, or obliterated and Naturalized". The Objective presents a target, whereas Alternatives Comparison Table and DEIS, identify these as "potential" changes. Furthermore, the Objective includes system roads, the Alternatives Comparison Table and EIS do not. Recommendations: a. Remove this objective.

Response:

A new objective was not added in response to this comment. However, the objective in the Roads and Facilities section has been adjusted to incorporate the suggested change. See FW-RdsFac-O-1. The adjusted Roads and Facilities objective to decommission 200 to 800 miles of unauthorized and system road clarifies that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest.

Commenter: Canaca, Laura

Comment:

52 LRMP: p 106 FW-Rec-Disp-DC Wildlife-Based Recreation #21 DC should be broadened. Recommendation: a. Add language to the effect that: "Motorized travel and dispersed camping opportunities provide reasonable access to big game, fishing, wildlife viewing and a quality recreational experience."

Response:

Motorized access for recreational activities is addressed in several places in the Forest Plan, however no one type of recreational activity (i.e., wildlife-based recreation) is highlighted over another. One desired condition in the Roads and Facilities sections has been adjusted to address this comment. The adjusted plan component specifically acknowledges a desire for reasonable motorized access (by road) for recreation. See FW-RdsFac-DC-1. A similar desired condition in the Trails and Trailheads section applies to motorized use on trails. See FW-Rec-Trails-DC-1. The Dispersed Recreation section contains a desired condition for motor vehicle use to occur at sustainable levels while providing opportunities for a variety of motorized use types and levels of challenge for a diversity of users. See FW-Rec-Disp-DC-2. Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. The Forest Plan includes a standard prohibiting motor vehicle use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps. See FW-Rec-Disp-S-1 and FW-RdsFac-S-1.

Commenter: Canaca, Laura

Comment:

50 LRMP: p 105 FW-Rec-Disp-DC Camping #13 DC does not effectively address demand for dispersed camping opportunities on the CNF. Recommendation: a. Modify to include: "Dispersed camping and parking is allowed across the broadest possible array of forest lands to accommodate a variety of uses and experiences and avoid unsafe camping conditions in close proximity to roads."

Response:

This desired condition has been adjusted in response to this comment. The portion of the plan component that suggested dispersed camping with recreational vehicles would occur in designated corridors has been removed because it is redundant of existing regulation and policy related to motorized activities. The desired condition acknowledges that a range of choices for both motorized and non-motorized dispersed camping is desirable. See FW-Rec-Disp-DC-4. Motor vehicle use, including motor vehicle use associated with dispersed camping, is addressed in another desired condition, which seeks to provide opportunities for a variety of motorized use types at sustainable levels. See FW-Rec-Disp-DC-2.

Commenter: Canaca, Laura

Comment:

47 LRMP: p 103 General Description for Dispersed Recreation Hunting and fishing are among the major dispersed recreation activities on the CNF. Department survey data report the following average annual hunter-days (does not include time spent scouting or by family members and others accompanying hunters afield) in Game Management Units 5A, 5B , 6A, 6B, 7E, 7W, and 7 for the years 2004-2013: Elk - 49,575; Small game - 45,320; Deer - 24,199; Turkey - 12,689; Javelina - 2,797; Antelope - 532, Bighorn - 8; All Species - 135,120. Here and elsewhere throughout the LRMP and EIS, motorized recreation, dispersed camping, hunting, and fishing are treated as separate activities, when in fact they are often linked. The majority of hunters and anglers rely on motorized travel to access areas within the forest. Hunters use motorized access to retrieve downed big game. Many also rely on dispersed camping opportunities within the CNF. Recommendations: a. Add hunting and fishing to listed activities.

Response:

The Forest Plan has been adjusted in response to this comment. The General Description for the Dispersed Recreation section has been edited to acknowledge that hunting and fishing are recreational activities that occur on the Forest. The Dispersed Recreation section also includes a desired condition that seeks to provide abundant and high-quality opportunities for hunting, fishing and other wildlife-based recreation opportunities. See FW-Rec-Disp-DC-5.

Commenter: Canaca, Laura

Comment:

e. Manage travel on the CNF through the TMP process.

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Commenter: Canaca, Laura

Comment:

d. Integrate TMP and LRMP revision efforts affecting travel management, communicate proactively to affected agencies and stakeholders.

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Commenter: Canaca, Laura

Comment:

b. Add an Objective from Kaibab NF LRMP: "Implement decisions made under the 2005 Travel Management Rule."

Response:

A new objective was not added in response to this comment. However, the objective in the Roads and Facilities section has been adjusted to incorporate the suggested change. See FW-RdsFac-O-1. The adjusted Roads and Facilities objective to decommission 200 to 800 miles of unauthorized and system road clarifies that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest.

Commenter: Canaca, Laura

Comment:

b. LRMP must recognize that elk provide significant cultural value, consumptive and nonconsumptive recreation, intrinsic value, significant economic benefit to local communities and businesses, and generate a significant source of revenue for the Department that is used for conservation of wildlife, including nongame species.

Response:

The Forest Plan recognizes the value of elk to forest users. The Wildlife, Fish, and Plants section includes a desired condition that characterizes elk as a charismatic species that residents and visitors appreciate and have ample opportunities to experience. See FW-WFP-DC-10. The General Description and Background for the Wildlife, Fish, and Plants section recognizes that people enjoy the wildlife on the Forest for a variety of reasons and acknowledges that elk are one of the nine big game species that occur on the Forest.

Commenter: Canaca, Laura

Comment:

53 LRMP: p 106 FW-Rec-Disp-DC Wildlife-Based Recreation #21 "Blinds, stands, cameras, and other structures brought in by the public are temporary and portable and do not have long-term effects on vegetation and wildlife." Statement is presumptive of impacts/conflicts that are not documented in the EIS. Blinds, stands, and cameras are important tools used by hunters and contribute to management of wildlife through hunting. Recommendation: a. Remove this statement.

Response:

The Forest Plan has been adjusted to address this comment. This component has been adjusted to have more strategic application and to remove the implication that these particular types of structures may have long-term effects on vegetation and wildlife. As a guideline, this component seeks to ensure that all recreational activities are managed to have minimal user conflicts and to be in balance with the capacity of other resources to support them. See FW-Rec-All-G-2.

Commenter: Canaca, Laura

Comment:

58 LRMP: p 127 MA-LngVal-G "Dispersed camping within 200 feet of riparian shoreline and aquatic resources should occur only where designated sites are provided." Inconsistent with restrictions elsewhere on the CNF. Recommendation: a. Increase to 300' for ease of interpretation by the public and consistency with limitation elsewhere on the CNF.

Response:

This guideline has been removed from the Plan because it already covered by more strategic forest wide direction. See FW-Rec-All-G-2 and FW-Rec-Disp-G-5. Neither of these guidelines identifies a specific distance limitation for dispersed camping. In its place, another guideline was crafted from language that was contained in a Long Valley Management Area desired condition. See FW-LongV-G-1. Strategic direction related to educating forest users about impacts from dispersed recreation (which would include dispersed camping near riparian areas) has been grouped into the Interpretation and Education section. See desired conditions, guidelines, and management approaches in FW-InterpEd.

Commenter: Canaca, Laura

Comment:

45 LRMP: p 76 FW-Invas-DC #2 "Desirable nonnative species such as elk, where they exist, are not having negative impacts on native species." Statement is inaccurate. Elk are native to Arizona and not considered or managed by the Department as an invasive species. Management authority for elk is vested by law with the Department. Recommendation: a. Remove this statement.

Response:

The desired condition has been adjusted in response to these comments. Elk are no longer referenced as a desirable nonnative species and are no longer mentioned in the Invasive Species section. See FW-Invas-DC-1.

Commenter: Canaca, Laura

Comment:

c. Provide a clear explanation of road management process in the LRMP.

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Commenter: Canaca, Laura

Comment:

e. Hunters would be required to use the most direct and least ground-disturbing route in and out of the area to accomplish the retrieval.

Response:

The forest plan is strategic in nature and does not include project and activity decisions. Accordingly, the plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The standards applied to other National Forests in Arizona are outside of the scope of the Forest Plan and plan revision process of the Coconino National Forest. The Forest Plan contains a standard that reflects the motor vehicle use maps which are produced as part of the implementation of the Travel Management Rule. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Commenter: Canaca, Laura

Comment:

a) The Forest Service should address these concerns through the statewide Native Fish Conservation Team and watershed planning process.

Response:

The Forest Plan has been adjusted in response to this comment. The Wildlife, Fish and Plants desired condition has been adjusted and the sentence referring to management of nonnative sport fish has been removed. Furthermore, a management approach has been added to the Wildlife, Fish, and Plants section to remind forest managers of coordination obligations on matters involving native and non-native fish. It states: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish. In addition, there are management approaches in All Recreation that state: Coordinate with the AZGFD to provide fishing access to meet goals and objectives of the Arizona Cold Water Fisheries Strategic Plan as well as a management approach in Designated Wilderness Areas that states: Coordinate with the Arizona Game and Fish Department on management of native species within wilderness per the current memorandum of understanding.

Commenter: Canaca, Laura

Comment:

44 LRMP: p 76 FW-Invas-DC #1 List is incomplete. Recommendation: a. Provide and/or reference existing lists of invasive species of concern on the CNF.

Response:

The Forest Plan has been adjusted in response to this comment. The specific examples of invasive species have been removed from the Forest Plan and the language describing what an invasive species is has been moved to the General Description and Background for the Invasive Species section. No specific list of species is being incorporated. Lists of invasive species are available from a number of sources. The Invasive Species section in Appendix D of the Forest Plan mentions one of those sources, U.S. Forest Service Invasive Species Program web site.

Commenter: Canaca, Laura

Comment:

c. Acknowledge that this alternative was developed by the Forest Service and not in coordination with the Department.

Response:

The Forest Service acknowledges that the Wildlife Habitat Management Areas included in Alternative C were not developed in coordination with the Department. The Wildlife Habitat Management Areas were included in Alternative C to respond to issues identified through scoping on the proposed plan related to noise disturbance and habitat connectivity for wildlife.

Commenter: Canaca, Laura

Comment:

b. Rename WMHAs to reflect their primary goals of establishing more wilderness and new "primitive areas. 11

Response:

Alternative C has been adjusted in response to these comments. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. One of the reasons for this emphasis is to benefit wildlife. One way that Alternative C responded to this concern was the inclusion of management areas that have an emphasis on reducing impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. These management areas unique to Alternative C included the term "wildlife habitat" in their name to help identify them. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Canaca, Laura

Comment:

81 DEIS Vol 3:p 966 Changes to Wildlife Habitat Management Area Direction in Proposed Plan "WHMA designation provides a low-disturbance wildlife habitat for native wildlife species, and it allows for improved wildlife habitat, including habitat connectivity, and protection of water quality and soil, vegetation, and water resources by further limiting motor vehicle traffic," An alternative ostensibly focused on wildlife should have been developed in coordination with the Department. The underlying of this alternative is that disturbances such as motorized travel, dispersed camping, and recreational shooting are primary factors reducing wildlife habitat quality and connectivity on the CNF. The Department does not agree with this perspective and considers asserted benefits to wildlife presumptive and secondary to an apparent larger goal of reducing current, appropriate uses across large portions of the CNF. Recommendations: a. Remove "wildlife" as a focal element of this alternative.

Response:

Alternative C has been adjusted in response to these comments. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. One of the reasons for this emphasis is to benefit wildlife. One way that Alternative C responded to this concern was the inclusion of management areas that have an emphasis on reducing impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. These management areas unique to Alternative C included the term "wildlife habitat" in their name to help identify them. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Canaca, Laura

Comment:

b. If such authority exists, involve the Department and the public in developing the description of the WHMAs, the Desired Conditions, and Guidelines for each WHMA.

Response:

Alternative C has been adjusted in response to this comment. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. The inclusion of "wildlife habitat" was not done to suggest that these areas were being designated as a "special area." Special areas are addressed in the Special Areas section in Chapter 3 of the Forest Plan. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. These management areas are still located in the Management Areas section in Chapter 3 of the Forest Plan. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Comment:

62 DEIS Vol 1:p 19 and Appendix F Alternative C General Overview "Alternative C responds to suggestions from the public for more land to be managed in primitive and natural settings with reduced human-related disturbance for the benefit of recreation, botanical, and wildlife resources." The Department understands the desire of some stakeholders to decrease or eliminate motorized access across large portions of the CNF, in order to provide a more "primitive" recreational experience. In addition to recommending thirteen wilderness areas, Alternative C also recommends the designation of eight "wildlife habitat management areas" [WHMAs] to be incorporated into the Proposed Plan: Anderson Mesa, East Clear Creek, Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, and Second Chance. WHMAs are designed to "provide protection for wildlife, vegetation, watersheds, and headwater environments", App. F at 966, primarily by excluding motorized access. Wildlife watching, fishing, hunting, horseback riding, mountain biking and hiking would be allowed. App. F at 967. Each WHMA is designed to protect identified species and habitat, with general guidelines, such as "no net increase in the area of motorized dispersed camping corridors", limits to roads that provide motorized access; and no public motor access at all to four of the WHMAs. "Large group recreation events" in WHMAs "should not be permitted". App. F at 967-968, The boundaries of these proposed WHMAs (DEIS Vol. 3, App. A, Map 3) is difficult to interpret, given the fact the WHMAs are depicted on a 10" by 5" map. No link identifying plan components associated with each WHMA is provided. The DEIS does not reflect the required analyses for ecosystem services and multiple uses for these WHMAs as set forth in National Forest System Land Management Planning rule 36 CFR 219.10, such as impacts to local economies, wildlife conservation, and hunting and fishing recreation. The Desired Conditions and Guidelines for these WHMAs are so vague that the Department cannot specifically identify how the plan components for each WHMA would impact its wildlife management authorities, or how public access to hunt and fish or recreate would be affected, much less frame comments specific to each WHMA. It should be noted that the Coconino NF Forest Plan Revision Team did not consult the Department or request the Department's collaborative participation in these WHMAs. The public likewise lacks adequate notice or a concise description of these WHMAs, or adequate public notice that vehicular access to additional portions of the Coronado NF may be restricted or banned. The Department requests a citation to the authority of the Forest Service Responsible Official to create WHMAs. FSH 1909.12, Land Management Planning Handbook, Ch. 10 at 11.15 (Special Areas) does not describe WHMAs as one of the categories of Responsible Official Designated Areas. Recommendations: a. Review the authority of the Responsible Official to create WHMAs.

Response:

Alternative C has been adjusted in response to this comment. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. The inclusion of "wildlife habitat" was not done to suggest that these areas were being designated as a "special area." Special areas are addressed in the Special Areas section in Chapter 3 of the Forest Plan. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. These management areas are still located in the Management Areas section in Chapter 3 of the Forest Plan. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Canaca, Laura

Comment:

f. Motorized vehicles would not be permitted to cross riparian areas, streams, and rivers except at hardened crossings or crossings with existing culverts

Response:

The Forest is not making site-specific decisions, such as where motorized big game retrieval is being allowed, in the Forest Plan. Appropriate areas for motorized big game retrieval have been and continue to be addressed through the Travel Management Rule (TMR) process, which makes decisions on road, trail, and off road use based on site specific information. The Forest Plan contains direction that will guide future decisions related to the concern expressed in this comment. A comprehensive set of desired conditions and other plan components are included in the Riparian Areas section (which includes streams) of the Forest Plan. See FW-Rip-All, FW-Rip-Strm, FW-Rip-Wtlns, FW-Rip-Spr, and FW-Rip-RipType in Chapter 2 of the Forest Plan. Plan components in the Recreation section require consideration of the desired conditions for other resources, including riparian and aquatic ecosystems, and provide other guidance designed to protect resources from potential impacts from motorized recreation. See FW-Rec-All-DC-6, FW-Rec-All-G-1 and 2, FW-Rec-Disp-DC-2 and 3, FW-Rec-Disp-S-1, and FW-Rec-Disp-G-1.

Commenter: Canaca, Laura

Comment:

57 LRMP: p 117 Management Areas Area descriptions, content, and level of detail vary greatly among MAs. Some sections are missing or incomplete. Examples: - Pine Belt MA includes most of the game species on the CNF and hunting is a very important consideration, yet hunting is not mentioned. - San Francisco Peaks MA is likewise important for big game hunting and a focal area for Department USFS collaborative management. This is likewise missing. - Kinnickinick Lake should be listed as an important lake in the Anderson Mesa MA - Long Valley MA is one of the most heavily visited areas on the CNF for a variety of recreational uses, yet has no section on Dispersed Recreation. Recommendation: a. Present consistent content and level of detail for each MA, including area descriptions, recreational opportunities, focal management issues, etc.

Response:

Several changes have been made in response to this comment. The General Description and Background sections for each management area have been edited to have a similar format and to have similar levels of detail. For example, a characteristics section has been added that provides a sketch of the resources and things that can be found in each management area. The plan was also reviewed to identify management area specific direction that was located in the forestwide and special areas sections of the Forest Plan. When appropriate, this direction was moved to the appropriate management area. For example, a Dispersed Recreation standard relating to the Nordic Ski Center Seasonal Closure Area was moved to the San Francisco Peaks Management Area because the standard only applies in that management area. See MA-Peaks-S-2.

Commenter: Canaca, Laura

Comment:

54 LRMP: p 106 FW-Rec-Disp-DC Wildlife-Based Recreation #21 "Wildlife viewing takes place in natural areas without disturbance to wildlife. " Unnecessarily narrow and awkward statement. Wildlife viewing occurs in a variety of settings from wilderness to highly-developed. Also implies either that natural areas lack disturbance, or that wildlife are not disturbed when viewed. Recommendation: a. Remove this statement.

Response:

The Forest Plan has been adjusted in response to this comment. A desired condition in the All Recreation section recognizes that wildlife-based recreation takes place in a variety of settings, from highly developed to primitive. The See FW-Rec-All-DC-8.

Commenter: Canaca, Laura

Comment:

d. MBGR is authorized in all areas unless designated as Wilderness Area or part of a previously existing (prior to TMR) Designated Roadless Area or when conditions are such that travel would cause damage to natural and/or cultural resources.

Response:

The forest plan is strategic in nature and does not include project and activity decisions. Accordingly, the plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The standards applied to other National Forests in Arizona are outside of the scope of the Forest Plan and plan revision process of the Coconino National Forest. The Forest Plan contains a standard that reflects the motor vehicle use maps which are produced as part of the implementation of the Travel Management Rule. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Commenter: Canaca, Laura

Comment:

c. Administratively closed roads are open to use for MBGR.

Response:

The forest plan is strategic in nature and does not include project and activity decisions. Accordingly, the plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The standards applied to other National Forests in Arizona are outside of the scope of the Forest Plan and plan revision process of the Coconino National Forest. The Forest Plan contains a standard that reflects the motor vehicle use maps which are produced as part of the implementation of the Travel Management Rule. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Commenter: Canaca, Laura

Comment:

b. MBGR is consistently authorized within a minimum one mile corridor on both sides of all designated roads and motorized trails.

Response:

The forest plan is strategic in nature and does not include project and activity decisions. Accordingly, the plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The standards applied to other National Forests in Arizona are outside of the scope of the Forest Plan and plan revision process of the Coconino National Forest. The Forest Plan contains a standard that reflects the motor vehicle use maps which are produced as part of the implementation of the Travel Management Rule. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Commenter: Canaca, Laura

Comment:

56 LRMP: p 106 FW-REC-Disp-S Motorized retrieval is an important element of big game hunting on the CNF, in order to provide reasonable access for hunters with varying levels of ability and disability, avoid spoilage/waste of game, and meet harvest objectives. Recommendations: Add standards to specify: a. Motorized big game retrieval (MBGR) is authorized for retrieval of bear, bison, elk, deer and pronghorn.

Response:

The forest plan is strategic in nature and does not include project and activity decisions. Accordingly, the plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The standards applied to other National Forests in Arizona are outside of the scope of the Forest Plan and plan revision process of the Coconino National Forest. The Forest Plan contains a standard that reflects the motor vehicle use maps which are produced as part of the implementation of the Travel Management Rule. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Commenter: Canaca, Laura

Comment:

These standards should be applied across all national forests in Arizona.

Response:

The forest plan is strategic in nature and does not include project and activity decisions. Accordingly, the plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The standards applied to other National Forests in Arizona are outside of the scope of the Forest Plan and plan revision process of the Coconino National Forest. The Forest Plan contains a standard that reflects the motor vehicle use maps which are produced as part of the implementation of the Travel Management Rule. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Commenter: Canaca, Laura

Comment:

c. Allowing camping and parking is authorized at all sites showing an established history of use including those on minor access roads connected to open forest roads.

Response:

The Forest Plan does not authorize or mandate any site specific projects or activities; therefore it cannot authorize camping or parking as requested in the comment. Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. The Forest Plan contains plan components that will help guide decisions on dispersed camping and parking. See FW-Rec-Disp-DC-2 and 4, MA-LongV-DC-2 and 3, and management approaches in the Dispersed Recreation section, which state: Establish long-term partnerships with recreation organizations to help plan, construct, and maintain motorized and non-motorized recreation opportunities and foster a low impact conservation ethic. Coordinate with city, county, state, and other agencies to manage motorized recreation and reduce cross-boundary conflicts.

Commenter: Canaca, Laura

Comment:

b. Allowing dispersed camping and parking within 300 feet of all open roads

Response:

No change has been made to the Forest Plan in response to this comment. Authorizing motorized camping in particular areas is not a plan-level decision. This concern is addressed under the Travel Management Rule, in travel management planning.

Commenter: Canaca, Laura

Comment:

55 LRMP: p 106 FW-REC-Disp-S The Department feels that recreational users are entitled to reasonable and consistent standards for dispersed camping and parking on lands administered by the USFS and must accommodate the safety, welfare and comfort of forest users by allowing for camping and parking at reasonable distances from forest road traffic. Recommendations: Add standards or modify those listed to specify: a. Clear and uniform signage. This should include marking of: open roads (indicated by number markers, open unless marked to the contrary), closed roads (indicated by no number markers or signed "closed"), and closed parking and camping areas (indicated by "closed" signs, open unless marked to the contrary).

Response:

Several adjustment have been made to the Forest Plan in response to these comments although no standard was added. A guideline that requires boundaries and routes to be clearly and uniformly identified has been added to the Dispersed Recreation section. See FW-Rec-Disp-G-1. The Forest Plan also has a desired condition and a guideline to provide visitors to the forest with properly placed, clear signs and information on authorized motorized use and restriction. See FW-InterEd-DC-5 and FW-RdsFac-G-3.

Commenter: Canaca, Laura

Comment:

59 LRMP: p 141 Management Approaches for Sedona Neighborwoods Management Area - Dispersed Recreation "Special hunting and shooting regulations should be developed collaboratively with the AZGFD, Yavapai and Coconino County Sheriffs, and City of Sedona Police Department." The Arizona Game and Fish Commission has authority for establishing hunting regulations. The Department coordinates with USFS when developing these regulations and has used this process to address objectives of mutual interest, e.g., as done recently for elk hunts on the San Francisco Peaks Hunt Unit, where post-fire aspen regeneration is a priority. The Department welcomes opportunities to collaborate with USFS, local law enforcement, and other partners to address concerns to recreational shooting. A recently developed pilot project with the Bureau of Land Management (Sonoran Desert National Monument) may provide a template for such collaboration. Recommendation: a. Reword statement to indicate: "Collaborate with the Department, local law enforcement, and other stakeholders to address issues and opportunities related to recreational shooting on the CNF."

Response:

The Forest Plan has been adjusted in response to this comment. Because this management approach has much broader applicability than the Sedona Neighborwoods Management Area, it has been moved to the forestwide All Recreation section of the Forest Plan, where it states: Collaborate with the AZGFD, local law enforcement, and other stakeholders to address issues and opportunities related to recreational shooting on the Coconino National Forest.

Comment:

Over the course of the LRMP revision process, the Department has communicated its concerns about further conversions of multiple use lands to special use designations, which can result in net losses of wildlife resources, wildlife-related recreational activities, and economic benefits. Our experience with wilderness elsewhere in Arizona has been that recommendation and designation can reduce access for wildlife-oriented recreation, affect the Department's ability to achieve big game harvest objectives through regulated hunting, and when combined with restrictions on motorized big game retrieval, may unfairly limit participation of the physically challenged. The Department has also found that management actions needed for wildlife population/habitat management are often prohibited outright in proposed or designated wilderness, or effectively precluded by complex and inefficient layers of bureaucratic process. To support the analysis of potential Wilderness Areas (PWAs) on the CNF, the Department provided the CNF with a detailed summary of management activities in each PWA that could be affected if the area was recommended or designated as wilderness. The Department also recommended considering alternative designations that would maintain wildlife values but allow needed flexibility for management. However, the proposed LRMP (Alternative B) recommends 3 new wilderness areas, Alternative C, 13 areas.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in

the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Canaca, Laura

Comment:

public lands should be managed for the full range of native and indigenous wildlife

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Canaca, Laura

Comment:

management direction within the alternative may not meet the purpose and need of the EIS and potentially conflicts with the USFS multiple-use mandate

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Canaca, Laura

Comment:

Alternative C is of particular concern. While ostensibly intended to benefit wildlife, this alternative was not developed in cooperation with the Department, which has pertinent subject matter expertise and statutory authority for managing wildlife. The Department is troubled by this apparent breach of coordination responsibilities under the National Environmental Policy Act, Fish and Wildlife Coordination Act, and our Memorandum of Understanding, not to mention what could be construed as an attempt by the Forest Service to provide unilateral management direction for wildlife resources. As a specific example, we would cite Alternative C's designation of "Wildlife Habitat Management Areas" and their associated featured species for management emphasis. The Department questions the Responsible Official's authority to designate Wildlife Habitat Management Areas. See Comment 62.

Response:

Alternative C has been adjusted in response to this comment. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. The inclusion of "wildlife habitat" was not done to suggest that these areas were being designated as a "special area." Special areas are addressed in the Special Areas section in Chapter 3 of the Forest Plan. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. These management areas are still located in the Management Areas section in Chapter 3 of the Forest Plan. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Canaca, Laura

Comment:

41 LRMP: p 75 FW-WFP-G #8 "Aquatic species should not be transferred through management activities from one code watershed, except for reintroductions or introductions of native species into suitable habitat" Management authority for these species is vested by law with the Department. This guideline is ill-defined, unduly restrictive, and beyond USFS purview. The Department is committed to responsible sport fish management and native fish conservation, and is actively addressing these concerns with our federal partners through Section 7 consultation, statewide Native Fish Conservation Team, and watershed management plans. Recommendations: a. Remove this guideline.

Response:

This guideline has been removed from the Forest Plan as suggested by the comment. The concern regarding habitat for and transfer of aquatic species is appropriately addressed in other plan components. See FW-WFP-DC-1, FW-WFP-G-3, FW-Invas-G-1, and 2 management approaches in the Invasive Species section, which remind forest managers to: Coordinate with stakeholders and the public to reduce, minimize, or eliminate the potential introduction, establishment, spread, and impact of non-native invasive species and to monitor the effectiveness of project design features. Encourage the prevention of accidental introduction and spread of invasive species carried by contaminated vehicles, equipment, personnel, or materials (including plants, wood, plant/wood products, water, soil, rock, sand, gravel, mulch, seeds, grain, hay, straw, animal feeds, or other materials).

Comment:

The Department appreciates that the proposed LRMP does not place new restrictions on recreational shooting on the CNF. However, the Department is particularly concerned by, and firmly opposed to, the drastic reductions in recreational shooting opportunity under Alternative C. Recreational shooting is recognized as a legitimate and important recreational opportunity that is greatly valued by the public. Significantly, and of great importance to the Department and our constituents, it provides a gateway into the shooting sports, hunting, and other outdoor recreation. Excise taxes on shooting firearms and ammunition also provide significant contributions to wildlife conservation. According to the USFWS 2011 National Survey of Hunting, Shooting, Angling and Outdoor Activities, 7.2 million people target shot nationwide, 2.9 million of whom visited organized shooting ranges. Much of the informal target shooting occurs on federal lands open for such activities. In many cases the noise generated by shooting has no greater impact than other activities occurring on USFS lands, e.g., wood cutting, OHVs, mining operations, etc. The Department considers the large scale closures to recreational shooting in Alternative C an unjustified restriction of legitimate use on public lands and a potential adverse impact to local economies and the Department's ability to meet agency mission, goals, and objectives. However, the Department understands that irresponsible actions by some illegal shooters can cause resource damage and safety concerns. The Department feels that enforcement and public education/outreach are more appropriate and effective strategies to address these issues on the CNF. We are currently working with stakeholders and public land managers elsewhere in Arizona to develop proactive approaches for managing recreational shooting. The Department would welcome the opportunity to establish a similar partnership on the CNF.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Canaca, Laura

Comment:

13 LRMP: 0 46 FW-Veg-Grass-All-G #2 "Natural waters within a quarter of a mile of fawning habitat should be maintained and available to pronghorn during the fawning season to maximize reproductive success." Developed water sources are also important to pronghorn. The Department sees the value in this but recommends coordinating with us to identify fawning areas pertinent to this guideline. Recommendation: a) Reword to include all water sources including natural and developed sources.

Response:

This guideline has been adjusted to incorporate your suggestion to include all water sources. See FW-WFP-G-5.

Draft

Comment:

Over the course of the LRMP revision process, the Department has communicated its concerns about further conversions of multiple use lands to special use designations, which can result in net losses of wildlife resources, wildlife-related recreational activities, and economic benefits. Our experience with wilderness elsewhere in Arizona has been that recommendation and designation can reduce access for wildlife-oriented recreation, affect the Department's ability to achieve big game harvest objectives through regulated hunting, and when combined with restrictions on motorized big game retrieval, may unfairly limit participation of the physically challenged. The Department has also found that management actions needed for wildlife population/habitat management are often prohibited outright in proposed or designated wilderness, or effectively precluded by complex and inefficient layers of bureaucratic process. To support the analysis of potential Wilderness Areas (PWAs) on the CNF, the Department provided the CNF with a detailed summary of management activities in each PWA that could be affected if the area was recommended or designated as wilderness. The Department also recommended considering alternative designations that would maintain wildlife values but allow needed flexibility for management. However, the proposed LRMP (Alternative B) recommends 3 new wilderness areas, Alternative C, 13 areas.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in

the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Canaca, Laura

Comment:

any potential benefits to wildlife are outweighed by negative impacts to the recreating public, necessary active management of wildlife habitat, and the Department's ability to meet its mandated trust responsibilities

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Comment:

Access restrictions in the proposed LRMP are not clearly linked to the ongoing Travel Management Planning (TMP) process on the CNF. This has created considerable confusion for agency reviewers and affected stakeholders. The Department is also concerned about inconsistencies in the LRMP and DEIS with respect to these restrictions which are framed both as hard targets and potential actions. Travel management should be addressed through the TMP process in a manner that is open, transparent, and allows effective participation by all stakeholders. The Department also sees this LRMP revision as a valuable opportunity to begin establishing reasonable and consistent guidelines for motorized travel and dispersed recreation across all national forests in Arizona.

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Commenter: Canaca, Laura

Comment:

The proposed LRMP (and other alternatives, particularly C) include new restrictions on motorized travel and dispersed camping, which are associated with recommended wilderness and changes in Recreational Opportunity Spectrum (ROS) settings outside wilderness. The process by which ROS objectives were developed for areas outside wilderness is opaque and needs to be clearly explained in the LRMP and DEIS. Under the proposed plan, 110,572 acres (6% of the forest) would be removed from motorized access. CNF visitors are already subject to restrictions on motorized access and dispersed camping that are unreasonable, difficult to interpret, and unenforceable. The Department stands firmly opposed to further, arbitrary reductions in public access on the CNF.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: Canaca, Laura

Comment:

b) This DC should also address populations of rare plants, which are components of other plant communities.

Response:

No change has been made in response to this comment. Populations of rare plants are addressed in the Wildlife, Fish, and Plants section, which discusses the desirability of functioning habitat and refugia to support species' populations. See FW-WFP-DC-5.

Commenter: Canaca, Laura

Comment:

10 LRMP: p 33 FW-Veg-All-0 #1 Lacking a definition of "restoration" this objective is vague and also likely unattainable over the life of this LRMP.
Recommendation: a) Change to "implement restoration treatments to restore

Response:

A definition for the term "restoration" has been added to the Glossary. It states that restoration is: The process of assisting in the recovery of an ecosystem that has been degraded, damaged, or destroyed (Society for Ecological Restoration International, 2004). Ecological restoration focuses on establishing or re-establishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions. Accordingly, any project or activity that assists in the recovery of a degraded, damaged, or destroyed ecosystem can be considered restoration. Restoration can be active or passive. Treatments that move ecosystem components toward desired conditions are considered restoration as are removal of impacts. Allowing natural processes to move ecosystem components toward desired conditions can also assist in the recovery of an ecosystem.

Commenter: Canaca, Laura

Comment:

11 LRMP: p 44 Objectives for Grassland Types Prescribed fire is an important and cost-effective tool in early stages of woody vegetation encroachment into grasslands and for maintaining these areas after mechanical treatment. Recommendation: a) Add prescribed fire objective(s).

Response:

The Forest Plan has been adjusted in response to this comment. The term "mechanically" has been removed from all three grassland objectives. See FW-TerrERU-Grass-O-1, 2, and 3. The adjusted objectives provide more strategic direction which allows the appropriate treatment options to be identified at the project level based on site specific information.

Commenter: Canaca, Laura

Comment:

d) Include spelunking and exploration as activities affecting caves.

Response:

The types of recreational opportunities available on the Forest are discussed in the General Description and Background for all Recreation. Spelunking has been listed as a specific recreational opportunity and caves have been listed as an area that can provide recreational experiences. The potential impacts to cave resources that could occur from this recreational activity are addressed in several plan components. See FW-BioPhys-Geo-1, 3, and 5; FW-BioPhys-Geo-S-1; FW-BioPhys-Geo-G-1, 2, 6, and 7; FW-Rec-All-DC-7; FW-Rec-All-G-1 and 2. See also Management Approaches in the FW-BioPhys-Geo section, which remind forest managers to: Encourage partnerships with organizations, scientists, and outdoor recreationists to secure, preserve, and protect forest biophysical features and their resources. Utilize current cave management plans and guides. Foster collaboration with the U.S. Fish and Wildlife Service, Bat Conservation International, Arizona Game and Fish Department, the National Speleological Society, and other stakeholders to address conservation, interpretation, and education management for cave dependent species and associated resources. For example, this collaboration could assist with understanding the cause and transmission of WNS (which is not currently well understood) or with the development and implementation of cave and karst management plans. Keep cave locations confidential except for caves that have been identified for recreational use. Cave records are managed at forest service locations where they are kept secured. Maintain a current list of significant caves on the forest and nominate new significant caves when identified. Monitor significant caves or other biophysical features to determine visitor impacts and the conditions of key resources. Educate the public about the unique ecological and aesthetic value of biophysical features including safety, etiquette, disease prevention, and resource protection.

Commenter: Canaca, Laura

Comment:

43 LRMP: p 75 FW-WFP-G #12 Guideline is unduly broad, adds an unnecessary layer of additional compliance, and impractical to implement. E.g., areas used by bats for foraging and watering will encompass most if not the entire forest. Tree roost sites are largely unknown, except where intensive research has been done. Recommendation: a. Delete this guideline and replace with statement that applicators should follow Best Management

Response:

This guideline has been adjusted in response to this comment to clarify its intent and scope of application. As adjusted, the guideline focuses more on directing projects to consider the potential negative impacts of pesticides, herbicides, or chemicals to species and their habitat. See FW-WFP-G-4.

Commenter: Canaca, Laura

Comment:

4 LRMP: p 27-28 General Description and Background for Caves, Cliffs, and Talus Slopes Recommendations: a) Consider adding abandoned mines to the list of special habitats, since they also provide similar habitat resources for bats.

Response:

No change has been made in response to this comment. The Geological Features (formerly Caves, Karst, Cliffs, and Talus Slope) section addresses management of a variety of features on the Forest. A review of the mining records on the Forest indicates that there are no underground mines on the Forest. However if any should occur in the future, abandoned mines should be managed to prevent disturbance to species and spread of disease. See FW-BioPhys-Geo-G-6.

Commenter: Canaca, Laura

Comment:

5 LRMP: p 29 FW-BioPhys-Geo-S Recommendation: a) Define "significant" cave.

Response:

The General Description and Background for the Geological Features section has been edited to respond to this comment. The term "significant cave" is now hyperlinked to the definition in the Glossary.

Commenter: Canaca, Laura

Comment:

6 LRMP: p 29 FW-BioPhys-Geo-G Guidelines are needed to address potential spread of White-nose Syndrome. Recommendation: a) Include guideline from Kaibab National Forest LRMP: "When entering caves or mines, decontamination procedures should be followed for preventing the spread of white-nose syndrome (WNS; *Pseudogymnoascus destructans*)."

Response:

Several adjustments have been made to the Forest Plan in response to comments regarding white-nose syndrome. A guideline that addresses the spread of diseases such as white-nose syndrome has been added to the Geological Features section. See FW-BioPhys-Geo-G-6. See also FW-WFP-G-3 which would manage activities and projects to prevent or reduce the likelihood of introduction or spread of disease. In addition, a management approach in the Geological Features section has been adjusted. It now contains a specific reference to white-nose syndrome and reminds forest managers to: Foster collaboration with the U.S. Fish and Wildlife Service, Bat Conservation International, Arizona Game and Fish Department, the National Speleological Society, and other stakeholders to address conservation, interpretation, and education management for cave dependent species and associated resources. For example, this collaboration could assist with understanding the cause and transmission of WNS (which is not currently well understood) or with the development and implementation of cave and karst management plans. White-nose syndrome would also be covered under desired conditions in the section on Invasive Species. These desired conditions promote invasive species being detected at an early stage and being absent or existing at levels that do not disrupt ecosystems or do not affect the sustainability of native species. See FW-Invas-DC-1 and 2. An Invasive Species guideline assures that measures would be incorporated into activities, planning, and implementation to address invasive species and the integrity of native species populations. See FW-Invas-G-1.

Commenter: Canaca, Laura

Comment:

7 LRMP: p 32-70 Vegetation Noxious and invasive weeds are addressed generically for all vegetation types, but only sporadically for individual vegetation types. Recommendations: a) Clarify distinction between noxious and invasive weeds, provide list(s) identifying them.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan refers to invasive and noxious species collectively as a invasive species. See definition of "noxious species" in the Glossary of the Forest Plan. The guidance for invasive species is generally included in the Invasive Species, All Ecosystems, and Wildlife, Fish, and Plants sections. References to individual invasive species are not being included because the species identified as invasive change over time. The definition of "invasive species" in the Glossary identifies the U.S. Department of Agriculture, Natural Resource Conservation Service as the source for the federal and state invasive plant species lists and the National Invasive Species Information Center as a source of information on invasive vertebrates, invertebrates, and microbes.

Commenter: Canaca, Laura

Comment:

b) Address weeds/invasives of concern in DCs for each type, or by reference to summary table.

Response:

References to individual invasive species and noxious weeds have not being added to the desired conditions for each ecological response unit because the species listed as invasive and noxious change over time. However, there are a several plan components that address invasive and noxious weeds regardless of where they occur. See FW-Invas-DC-1 and a management approach for Invasive Species, which states: Maintain a current inventory of invasive species on forest lands. For plant inventories, prioritize areas of unique and rare habitats first, areas of high use and disturbance second (e.g., material pits, trailheads, campgrounds, corrals, roads, boat ramps, and bridges), and areas where invasive species are just getting established.

Commenter: Canaca, Laura

Comment:

8 LRMP: p 33 FW-Veg-All-DC #15 Unclear which pollinators are of interest and what these desired conditions would be. Recommendation: a) Clarify or omit.

Response:

The Forest Plan has been adjusted in response to this comment. This topic is addressed the All Ecosystems section, which includes a desired condition for ecosystem conditions to promote endemic levels of pollinators. See FW-Eco-DC-4. Furthermore, a reference to the National Pollinator Best Management Practices has been added to the All Ecosystems section in Appendix D, Other Sources of Information. The Forest Plan does not identify particular pollinators of interest; they will be identified at the project level based on site-specific information.

Commenter: Canaca, Laura

Comment:

9 LRMP: p 38 FW-Veg-All-DC #13 Recommendations: a) Identify endemic plant communities of concern.

Response:

The endemic species currently being considered are being addressed in the environmental impact statement. A list of endemic species of concern is not being included in the plan because it will change over time.

Commenter: Canaca, Laura

Comment:

benefits to wildlife from reduced motorized travel, dispersed camping, and recreational shooting are overstated, largely speculative, and secondary to the apparent larger goal of reducing current, appropriate uses across large portions of the CNF

Response:

No change has been made in the Forest Plan in response to comment. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. One of the reasons for this emphasis is to benefit wildlife. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Canaca, Laura

Comment:

b) Indicate that caves are also important as hibernacula for bats.

Response:

The General Description and Background for the Geological Features section has been adjusted to address this comment. This section now expressly acknowledges that caves can provide hibernacula for bats.

Commenter: Canaca, Laura

Comment:

management direction under this alternative is unlikely to achieve desired outcomes for wildlife

Response:

No change has been made in the Forest Plan in response to comment. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. One of the reasons for this emphasis is to benefit wildlife. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Canaca, Laura

Comment:

3 LRMP: p 26 FW-Aq-Spr-DC #2 "Water flow patterns, recharge rates, and geochemistry are similar to historic levels and persist over time." This may not be realistic in the face of recurring droughts and/or climate change. Recommendation: a) Reword appropriately.

Response:

The desired condition has been adjusted to address your comments. The word "healthy" is no longer being used as a description of condition. The reference to "historic levels" has also been removed. See FW-Rip-Spr-DC-1.

Commenter: Canaca, Laura

Comment:

b) The Forest Service should work with the Department and USFWS to identify ecologically sensitive watersheds.

Response:

The Forest Service uses the Watershed Condition Framework to identify priority watersheds. The Forest Service coordinates with Arizona Game and Fish as part of the Framework process.

Commenter: Canaca, Laura

Comment:

2 LRMP: p 20 FW-Aq-Wat-DC #7 "Watersheds that contain recharge areas for designated and eligible wild and scenic river segments retain water quality and recharge to those segments." Statement is unnecessarily restrictive. Recommendations: a) This DC should not be limited to segments designated/eligible for Wild and Scenic status.

Response:

This desired condition has been adjusted to incorporate your suggestion; it is no longer restricted to wild and scenic rivers. See FW-Water-DC-6.

Commenter: Canaca, Laura

Comment:

1 LRMP: p 19-20 FW-Aq-Wat-DC Developed water sources (stocktanks, catchments, trick tanks, springs) are of critical importance to game and nongame wildlife on the Coconino National Forest (CNF), and likely to become even more so in the face of recurrent drought and potential climate change. Recommendation: a) Add DC indicating that "Developed water sources are adequately distributed across the landscape and maintained to meet wildlife needs. "

Response:

Several desired conditions and guidelines have been incorporated into the Forest Plan to address your comment. See FW-ConstWat-DC-1 and 2 and FW-ConstWat-G-2. Another desired condition in the Wildlife, Fish, and Plants section recognized the potential necessity of human-made habitats to support wildlife. See FW-WFP-DC-8.

Commenter: Canaca, Laura

Comment:

reverting to management of old-growth under direction of the 1987 LRMP fails to incorporate the best available science and retains an outdated management framework.

Response:

Under Alternative C, the standards and guidelines for old growth set forth in the current 1987 plan, as amended in 1996, would be carried forward into the new plan. In Ponderosa pine and mixed conifer forests, the emphasis under the 1987 plan is placed on creating and maintaining large stands (100-300 acres) or large aggregations of contiguous stands that all have the full suite of old growth characteristics (1987 Plan, new page 70-2; 129; 138). The effects of this proposed plan direction is fully considered in the Vegetation and Fire Specialist Report (Forest Service, 2015). Generally, within the Ponderosa pine and mixed conifer forests, the 1987 plan direction would encourage a forest structure that does not match the historic condition or the desired conditions. Larger areas with a closed canopy and a more even-age structure would occur across the landscape. While this structure is not supported by the best available science that is specific to southwestern frequent fire forests (Reynolds et al. 2013), these standards and guidelines were carried forward into Alternative C in response to stakeholder input and to provide an opportunity to analyze the effects of incorporating these old plan components into the proposed revised plan.

Commenter: Canaca, Laura

Comment:

14 LRMP: p 46 Table 5 Chaparral habitat is important to a variety of wildlife species. Proportions of seral stages listed in the table reflect a very monotypic condition that is undesirable and at odds with natural disturbance regimes. Information in this table is not consistent with stated desired conditions. Recommendation: a) Identify desired conditions consistent with natural disturbance regimes in this system, that ensure diversity at multiple scales. b) Ensure consistency between tables and text.

Response:

The seral stages listed in this table are intended to disclose the desired proportion of seral stages for interior chaparral at the forest scale. The table in this section (along with similar tables included in the plan direction for other Ecological Response Units) has been moved to Appendix F of the Plan. The Introduction for Appendix F explains that seral stage proportions for modeled states should be assessed at the scale of the entire Ecological Response Unit within a Forest boundary or greater. Seral stage proportions are rarely, if ever, applied at the project level. These seral stages are intended to reflect the natural disturbance regime, characteristic fire return interval, and the rapid growth of chaparral species following disturbance.

Commenter: Canaca, Laura

Comment:

c) Address other important habitat values of cliffs and talus slopes, e.g., nesting habitat for raptors and hibernacula for reptiles.

Response:

The General Description and Background for the Geological Resources section has been adjusted in response to this comment. Additional information has been added regarding the habitat values for cliffs and talus slopes, including acknowledgement of nesting habitat for raptors and hibernacula for reptiles.

Commenter: Canaca, Laura

Comment:

38 LRMP: p 73 FW-WFP-DC #11 "There is more emphasis, interest, and opportunity to fish for native sport fish" Management authority for sport fish rests with the Department, not the Forest Service. The Department is committed to responsible sport fish management and native fish conservation, and is actively addressing these concerns with our federal partners through Section 7 consultation, statewide Native Fish Conservation Team, and watershed management plans. Recommendations: a) Remove this statement.

Response:

The Forest Plan has been adjusted in response to this comment. The part of the desired condition expressing an emphasis on native sport fish has been modified. The Forest Plan now expresses a desire for forest visitors to have an appreciation for native fish and for native sport fishing to emphasize where the opportunities exist. See FW-WFP-DC-10. A management approach in the Wildlife, Fish, and Plants section reminds forest managers to coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for native species and the management of sport and native fishes, including the identification of refugia for native fish. It states: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish.

Commenter: Canaca, Laura

Comment:

12 LRMP: p 45 FW-Veg-Grass-GB&MSG-G "New stock tanks and wildlife waters should be placed in locations that reduce concentrations of grazing animals and subsequent vegetation and soil effects in open areas." It's unclear how water placement could accomplish the stated outcome. Compared to livestock, the impacts of wildlife on soils and vegetation near waters are generally lesser and highly localized. It's unclear whether the intent here is to improve animal distribution or place waters in locations less vulnerable to soil/vegetation impacts. Recommendation: a) Clarify appropriately.

Response:

The Forest Plan has been adjusted in response to this comment. This Grassland ERU guideline has been adjusted to clarify that the intent is to protect grassland composition, structure, and productivity and soil function by, among other things, strategically locating constructed waters. See FW-TerrERU-Grass-G-2. The Plan has also been modified to account for conditions immediately adjacent to livestock concentration areas, such as waters, that might be different than general desired conditions for vegetation and soil. See FW-Graz-DC-2.

Commenter: Canaca, Laura

Comment:

32 LRMP: p 72 and elsewhere in DEIS FW-WFP-DC "Sustainable populations of native and desirable nonnative plant and animal species" Elsewhere in the document, elk were incorrectly classified as "desirable nonnative" species. Unclear what other species fall into this category. Elk have occurred on the Forest through history until extirpated. Elk of today are of the same genus/species as that which were extirpated. The taxonomy of the Merriam's elk is loosely established in the literature and based on a very few partial specimens. Recommendation: a) Provide list of these plant and animal species.

Response:

The Forest Plan has been adjusted in response to this comment. A list of desirable non-native species has not been added to the Forest Plan, but a definition for the term "desirable non-native species" has been added to the Glossary. It acknowledges that these species have high positive social or economic value.

Commenter: Canaca, Laura

Comment:

33 General Description and Background for Wildlife, Fish, and Plants Desert sucker is listed as "other," and not as a sport fish in Department regulations. Headwater chub, a native sport fish, also occurs in Fossil Creek. Recommendation: a) Correct as noted.

Response:

The General Description and Background for the Wildlife, Fish, and Plants section of the Forest Plan has been adjusted in response to your comment. Desert chub are no longer included in the discussion of "sport fish" and the presence of headwater chub in Fossil Creek has been acknowledged.

Commenter: Canaca, Laura

Comment:

34 LRMP: p 72-73 FW-WFP-DC #1 "Human-made or altered habitats may be necessary to support populations in the short term, but in the long term, species are enhanced and/or returned to natural habitat." Statement discounts reality that long-term, periodic manipulations to habitat may be necessary to achieve fish and wildlife conservation objectives and in some areas, natural processes may nor may not achieve desired conditions over the long-term. Recommendations: a) Reword DC to reflect role of management intervention to meet conservation objectives.[...] b) Remove reference to "natural habitat."

Response:

This desired condition has been adjusted in response to the comments. One of the purposes of the component is to recognize that human-made or altered habitats may be needed to support species populations or meet long term population goals. The desired condition has been adjusted to clarify this purpose. See FW-WFP-DC-8.

Commenter: Canaca, Laura

Comment:

35 LRMP: p 73 FW-WFP-DC #7 Is somewhat redundant with DC #6. Recommendation: a) Combine these DCs.

Response:

This desired condition has been merged with FW-WFP-DC-6 to address your comment.

Commenter: Canaca, Laura

Comment:

36 LRMP: p 73 FW-WFP-DC #8 "Barriers to movement are located where necessary to protect native fish from nonnative species until watershed restoration allows connectivity to be restored." All fish barriers, purposefully constructed, "natural" or otherwise, have the potential to be beneficial or harmful to native fish species depending on the location of the barrier and the species composition upstream and downstream of the barrier. Some watersheds may never be fully restored, requiring barriers to remain in place. Barriers need to be evaluated to determine if they are harmful to native aquatic species prior to being eliminated. Recommendation: a) Reword appropriately.

Response:

The Forest Plan has been adjusted in response to this comment. The topic of situational desirability of barriers in streams to restrict passage of aquatic species that can be harmful to native aquatic species is addressed in a separate desired condition in the Wildlife, Fish, and Plants section. See FW-WFP-DC-9. A management approach in Wildlife, Fish, and Plants has been adjusted to remind managers to coordinate with agencies regarding the establishment or removal of fish barriers. It reads: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing.

Commenter: Canaca, Laura

Comment:

30 LRMP: p 66 FW-Veg-MC-MCA Recommendation: a) Add objective(s) for treatments to enhance aspen and recruitment.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan includes an objective to restore at least a 1,000 acres of aspen and maple. See FW-TerrERU-O-1.

Commenter: Canaca, Laura

Comment:

37 LRMP: p 73 FW-WFP-DC #11 "The forest is known for high quality hunting and fishing opportunities." Recommendation: a) Replace with "The forest provides abundant and high-quality opportunities for hunting, fishing, and non-consumptive wildlife-based recreation."

Response:

Several adjustments were made in response to this comment. Because the activity discussed in this desired condition is a form of recreation, this plan direction has been moved to the Recreation section in the Forest Plan. Wildlife based recreation in general is addressed in FW-Rec-All-DC-8. The comment's specific suggestions regarding hunting and fishing have been incorporated into a Dispersed Recreation desired condition. See FW-Rec-Disp-DC-5.

Commenter: Canaca, Laura

Comment:

29 LRMP: 0 65 FW-Veg-MC-MCA-DC "Where they naturally occur, all age classes of aspen and maple are present in even-aged groups or patches ..." Reproduction by seed and suckering often creates uneven-aged structure, i.e., scattered individuals of varying ages under mature trees. Recommendation: a) Reword appropriately.

Response:

The Forest Plan has been adjusted in response to this comment. A separate section for Aspen and Maple has been added to the Terrestrial Ecological Response Units section. One of the desired conditions for Aspen and Maple notes that where they naturally occur, all age classes are present in groups or patches. See FW-TerrERU-AspMpl-DC-1.

Commenter: Canaca, Laura

Comment:

b) The Forest Service should address these concerns through the statewide Native Fish Conservation Team and watershed planning process.

Response:

The Forest Plan has been adjusted in response to this comment. The part of the desired condition expressing an emphasis on native sport fish has been modified. The Forest Plan now expresses a desire for forest visitors to have an appreciation for native fish and for native sport fishing to emphasize where the opportunities exist. See FW-WFP-DC-10. A management approach in the Wildlife, Fish, and Plants section reminds forest managers to coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for native species and the management of sport and native fishes, including the identification of refugia for native fish. It states: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish.

Commenter: Canaca, Laura

Comment:

39 LRMP: p 73 FW-WFP-DC #11 "Nonnative sport fish and habitats are managed in locations and ways that do not pose substantial risk to native species" Management authority for sport fish rests with the Department, not the Forest Service. The Department is committed to responsible sport fish management and native fish conservation, and is actively addressing these concerns with our federal partners through Section 7 consultation, statewide Native Fish Conservation Team, and watershed management plans. Recommendations: b) Remove this statement.

Response:

The Forest Plan has been adjusted in response to this comment. The Wildlife, Fish and Plants desired condition has been adjusted and the sentence referring to management of nonnative sport fish has been removed. Furthermore, a management approach has been added to the Wildlife, Fish, and Plants section to remind forest managers of coordination obligations on matters involving native and non-native fish. It states: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish. In addition, there are management approaches in All Recreation that state: Coordinate with the AZGFD to provide fishing access to meet goals and objectives of the Arizona Cold Water Fisheries Strategic Plan as well as a management approach in Designated Wilderness Areas that states: Coordinate with the Arizona Game and Fish Department on management of native species within wilderness per the current memorandum of understanding.

Commenter: Canaca, Laura

Comment:

The CNF is of tremendous importance for wildlife-based recreation, which is appropriately noted in the LRMP. However, the overarching tone of the LRMP and DEIS presents an unbalanced emphasis on non-consumptive uses of wildlife. For example, the documents emphasize wildlife viewing as an important recreational activity throughout the documents whereas hunting and fishing are outlined in only a few, very specific areas. See comment table for specific recommendations. The Department recognizes that demand for such opportunities has increased tremendously since the last LRMP revision and expends considerable resources promoting and supporting non-consumptive wildlife recreation on the CNF and across Arizona. However, traditional, wildlife-based recreation (e.g., hunting) remains the foundation for wildlife conservation in North America, is a primary recreational activity on the CNF and generates important economic benefit for northern Arizona. Hunter survey data for 2004-2013 indicate an annual average of 135,119 hunter-days spent pursuing small and big game in Game Management Units SA, SB, 6A, 6B, 7E, 7W, and 7. This number presents only a partial picture, as it does not include time spent scouting and by family members and other individuals who accompany hunters afield. The Department is also concerned that hunting, angling, motorized access, recreational shooting and dispersed camping are treated as independent activities, when in fact they are often occur concurrently. The final LRMP and EIS should equitably address all forms of wildlife-based recreation and their interdependence with other activities on the CNF.

Response:

The Forest Plan has not been changed in response to this comment. The Forest Plan has a strategic approach to recreation in general, which includes hunting and fishing, and has desired conditions that would promote a variety of recreational experiences, opportunities, and settings. See FW-Rec-All-DC-2, 4, 6, 8 and FW-RecDisp-DC-1. Hunting and fishing are specifically mentioned in FW-RecDisp-DC-5 which reads: The Coconino NF provides abundant and high-quality opportunities for hunting, fishing and other wildlife-based recreation opportunities.

Commenter: Canaca, Laura

Comment:

40 LRMP: p 74 FW-WFP-0 Recommendation: a. Add objective for 10 actions benefitting wildlife or fish other than T&E/sensitive.

Response:

No change has been made to the Forest Plan in response to this comment. While two of the objectives focus on threatened, endangered, and sensitive species, actions taken in pursuit of these objectives could also be beneficial for other wildlife and fish species. See FW-WFP-O-1 and 2. Two other objectives seek to restore or enhance areas of terrestrial wildlife and stream habitat, which could be beneficial for other wildlife and fish species. See FW-WFP-O-3 and 4. Objectives associated with the various ERUs may also benefit wildlife species. Site specific NEPA would be done in an interdisciplinary fashion prior to implementing those objectives and wildlife, fish, and plant input would be incorporated in the final decision prior to objective implementation. Finally, forest restoration activities are not limited to those listed in the objectives so other restoration actions can be undertaken as opportunities arise.

Comment:

B The Forest Service should address these concerns through the statewide Native Fish Conservation Team, and watershed management planning process.

Response:

The Forest Plan addresses the native fish species and the concerns related to disease and non-native species through a variety of strategic and specific plan components. Broad plan components describing desired habitat conditions, including the presence of non-native fish and disease have been included in the All Ecosystems section. See FW-Eco-DC-1 and 4. Desired conditions in the All Riparian, Streams, and Springs sections seek to provide habitat for all species on the Forest. See FW-Rip-All-DC-3, FW-Rip-Strm-DC-2, and FW-Rip-Spr-DC-5. The Wildlife, Fish, and Plants section includes additional direction on desired habitat conditions, including habitat for species listed under the Endangered Species Act and aquatic species. See FW-WFP-DC-1, 2, 3, 4, and 6. Consistency with these desired conditions is required when implementing decisions under the Forest Plan. See the Guiding Future Projects, Program Plans, and Assessments section in Chapter 1 of the Forest Plan. A variety of guidelines throughout the Forest Plan require projects and activities to be designed and managed to maintain or move towards these desired conditions. The Forest Plan places an emphasis on native species, addressing them in many plan components. For examples, see FW-Eco-DC-1 and 4, FW-Water-DC-6, FW-Water-G-6, FW-Rip-Strm-G-1, FW-Rip-Wtlns-DC-1 and 2, FW-Rip-Spr-DC-2, FW-Rip-Spr-G-3, FW-Rip-RipType-DC-2 and 6, FW-Rip-RipType-G-2, FW-WFP-DC-1, 2, 3, 4, 9, and 10, FW-WFP-G-3, FW-Invas-DC-1, FW-Invas-G-1 and 2, FW-Graz-G-7, FW-RdsFac-G-9, FW-Rec-Dev-G-2, and FW-Scenic-DC-1. The Forest Plan also contains plan components that address non-native species. The Forest Plan recognizes that some non-native species may be present and in balance with properly functioning ecosystems. See FW-Eco-DC-4. A Wildlife, Fish, and Plants component recognizes that barriers to passage can be desirable to physically separate native and non-native species. See FW-WFP-DC-9. A Wildlife, Fish, and Plants management approach reminds forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing. Several components also address the management of invasive species for the benefit of native species. See FW-Invas-DC-1. A management approach in the Invasive Species section reminds forest managers to: Coordinate with stakeholders and the public to reduce, minimize, or eliminate the potential introduction, establishment, spread, and impact of non-native invasive species and to monitor the effectiveness of project design features. Finally, the management of disease in aquatic systems is addressed in several guidelines. See FW-Rip-Spr-G-3 and FW-WFP-G-3 and 12.

Commenter: Canaca, Laura

Comment:

42 LRMP: p 75 FW-WFP-G #11 The Department supports and appreciates inclusion of this guideline. Recommendation: a. Reference Department Guidelines for wildlife-friendly fencing.

Response:

The guideline related to construction for wildlife friendly fences has been retained with slight editorial adjustments to improve its clarity. See FW-WFP-G-6. Another guideline has been added to the Wildlife, Fish, and Plants section that requires structural improvements to be planned and managed to provide wildlife with safe use of water and to allow safe passage. See FW-WFP-G-5. These guidelines would be applicable to any new decisions on fence construction and/or modification of existing fencing. In addition, a sentence has been added to a management approach in Wildlife, Fish, and Plants to remind managers to reference current agency recommendations for improving wildlife habitat. It reads: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing.

Commenter: Canaca, Laura

Comment:

b) The Forest Service should coordinate with the Department to evaluate any barriers prior to removal or mitigation.

Response:

The Forest Plan is, by design, strategic in nature and does not identify the removal or mitigation of any particular aquatic barrier on the Forest. Removal or mitigation of a specific aquatic barrier is a project level decision that would be made based on site-specific information and analysis, and therefore not a forest plan level decision. However, the Forest Plan addresses this concern through a management approach that reminds forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing.

Commenter: Canaca, Laura

Comment:

22 LRMP: p 55 FW-Veg-PP-DC #18 Reference to "historic" patterns could be construed to mean conditions present after extensive timber harvest and aggressive fire suppression were initiated. Recommendation: "Pre-settlement conditions" and the "historical range of natural variability" may be more appropriate benchmarks for management, with the caveat that climate change may move some ecosystems outside those domains.

Response:

The Forest Plan has been adjusted in response to this comment and to clarify what is meant when a plan component refers to historic vegetation conditions. See the definition for "Historic vegetation conditions" in the Glossary.

Commenter: Canaca, Laura

Comment:

15 LRMP: p 46 FW-Veg-IC-DC DCs #1 and #3 contradict each other with respect to fire intervals (frequent vs. long-return). Recommendation: a) Correct as needed.

Response:

The Forest Plan has been adjusted in response to this comment. The desired conditions related to fire in the Interior Chaparral ERU have been grouped into one desired condition to remove the apparent contradiction. See FW-TerrERU-IC-DC-3.

Commenter: Canaca, Laura

Comment:

16 LRMP: p 46 Pinyon-Juniper Types Stringers/inclusions of ponderosa pine embedded in p-j woodlands provide important habitat for Merriam's turkey and other wildlife. Recommendation: a) Add these to vegetation type descriptions with appropriate DC. The Department also recommends protecting these ponderosa pine inclusions from high-intensity prescribed burns or wildfire.

Response:

Several adjustments have been made to the Forest Plan to address this comment regarding pine stringers. A discussion on stringers has been added to the General Description and Background for the All Terrestrial ERUs section. The reference to stringers in the pinyon-juniper desired conditions was moved to the All Terrestrial ERUs section to acknowledge the value of stringers in other ERUs. See FW-TerrERU-All DC-4. A guideline was added to the All Terrestrial ERUs section to ensure that stringers are protected from uncharacteristic disturbances to prevent stand replacement and to protect their unique contribution to habitat diversity. See FW-TerrERU-G-4.

Commenter: Canaca, Laura

Comment:

17 LRMP: p 51 FW-Veg-PJ-All-G #4 There are circumstances where native plant materials may be unavailable or insufficient to address site specific problems (e.g., severely degraded soils, areas dominated by highly competitive invasive noxious weeds, large-scale fires). Recommendation: a) Use of desirable, non-native plant materials should be allowed under these special circumstances where native plant materials are either unavailable or cost-prohibitive.

Response:

The Forest Plan has been adjusted in response to this comment. The guideline addressing the use of native species to support restoration activities has been adjusted to apply to all terrestrial ERUs and to acknowledge that use desirable, non-native plant materials may be allowed where native plant materials are unavailable, cost-prohibitive, insufficient to address site specific problems, and the non-native plant materials do not impede re-establishment of native species. See FW-TerrERU-All-G-3.

Commenter: Canaca, Laura

Comment:

18 LRMP: p 51 FW-Veg-PJ-PJG-0 Natural ignitions are unlikely to meet this objective. Recommendation: a) Add prescribed fire.

Response:

No change has been made in response to this comment. It is true that attaining this projected treatment level would depend on the location of ignitions, conditions at the time of ignition, and resources at risk. However, given historical levels of natural ignitions in the Pinyon Juniper with Grass ERU, it is projected that over a 10 year period it is likely that this objective will be met relying on naturally ignited wildfires. Furthermore, prescribed fire in the ERU would not be prohibited because it is not expressly included in an objective.

Commenter: Canaca, Laura

Comment:

19 LRMP: p 53 Table 9. Desired proportion of seral stages for Ponderosa Pine Early Development stage (openings dominated by herbaceous plants) is a natural component of ponderosa pine systems and important to wildlife. Why is the desired proportion = 0? Recommendation: a) Use data from ERI and other recent studies to set an appropriate DC.

Response:

The seral stages listed in the table that was included Ponderosa Pine Ecological Response Unit section are intended to represent the desired proportion of seral stages for ponderosa pine at the forest scale. The proportions were not adjusted in response to these comments. This table (along with similar tables included in the plan direction for other Ecological Response Units) has been moved to Appendix F of the Plan and is now identified as table 17. The Introduction for Appendix F explains that seral stage proportions for modeled states should be assessed at the scale of the entire Ecological Response Unit within a Forest boundary or greater. Collectively the table plus the more detailed text in the plan comprise the desired conditions. Seral stage proportions are rarely, if ever, applied at the project level. Because these seral stages only apply at these very broad scales, they should not conflict with variations in seral stages that are associated with natural disturbance regimes observed at the project level. The seral stage table for ponderosa pine in Appendix F has been modified to clarify that recently burned (in the Early Development state) refers to larger than desired openings being created primarily by stand-replacing wildfire when it occurs in closed canopy states (State N). This would result in a longer time period required to move back to a forested state compared to characteristic wildfires. The early development state also include characteristic states which existed in reference conditions (State A). The desired condition is to have characteristic fire sustain predominantly open ponderosa pine. Predominantly open conditions would support herbaceous plants, properly functioning soil, natural disturbance regimes, and all-aged vegetation structure. See FW-TerrERU-PP-DC-2, 3, 4, 8, 10, and 13. In table 17, mid-aged forest and mature/old forest are combined to reflect the intermix of age classes present at the landscape level. This would reflect landscape-scale desired conditions of a mosaic of trees of various age classes; of trees in structural stages that range from young to old; an arrangement of individual trees, small clumps and groups interspersed with variably sized openings; groups of similarly aged trees and single trees interspersed with open interspaces; and various proportions of patches with different developmental stages. See FW-TerrERU-PP-1, 4, 6. It is important to note that the desired openings for grass, forb, and shrub understory vegetation is built into the multistoried (uneven-aged) states and is not identified separately.

Commenter: Canaca, Laura

Comment:

31 LRMP: p 67 FW-Veg-SF-DC #2 Reference to "historic" patterns could be construed to mean conditions present after extensive timber harvest and aggressive fire suppression were initiated. Recommendation: "Pre-settlement conditions" and the "historical range of natural variability" may be more appropriate benchmarks for management, with the caveat that climate change may move some ecosystems outside those domains.

Response:

The Forest Plan has been adjusted in response to this comment and to clarify what is meant when a plan component refers to historic vegetation conditions. See the definition for "Historic vegetation conditions" in the Glossary.

Commenter: Canaca, Laura

Comment:

21 LRMP: p 55 FW-Veg-PP-DC #17 Opening and group sizes specified here may not capture the historic range of variability. Recommendation: a) Modify to allow larger o

Response:

Although the Ponderosa Pine ERU desired condition in question addresses openings at the fine scale, it does not apply any particular size to them. See FW-TerrERU-PP-DC-13. Opening sizes are addressed in the landscape scale and mid-scale desired conditions. See FW-TerrERU-PP-DC-4 and 8. Because no size was prescribed for openings at the fine scale, no adjustment has been made in response to this part of the comment. However, a size was assigned to groups (typically less than 1 acre) at the fine scale. See FW-TerrERU-PP-DC-13. The desired condition did note that group sizes may be larger in areas managed for bald eagles and Mexican spotted owls. In response to this comment, the Ponderosa Pine ERU desired condition has been adjusted to acknowledge that groups sizes may be larger when there is site specific information indicating that historically the group was larger. See FW-TerrERU-PP-DC-13.

Commenter: Canaca, Laura

Comment:

23 LRMP: p 56 FW-Veg-PP-O #1 - obtaining the desired within-group variability in tree size/age may require selective removal of individual trees, rather than groups. As defined in the Glossary, it's unclear whether "free thinning" allows selective harvest to meet this objective. Recommendation: a) Clarify that free thinning includes selective cutting or add selective cutting to the list.

Response:

The Forest Plan has been adjusted in response to this comment. Free thinning and group selection were two examples of prescribed cutting included in an objective in for the Ponderosa Pine ERU. These examples have been removed from the objective. See FW-TerrERU-PP-O-1. However, a definition for "prescribed cutting" has been added to the Glossary in the Forest Plan. The definition does not try to make an exhaustive list of prescribed cutting techniques. Rather, the definition states that prescribed cutting is: Vegetation removal under conditions specified in an approved plan to remove unwanted fuels; create openings; stimulate growth of desired vegetation; change seral stages; and to meet range, wildlife, recreation, wilderness, watershed, or timber management objectives.

Commenter: Canaca, Laura

Comment:

24 LRMP: p 61 FW-Veg-MC-MCFF-DC #3 Reference to "historic" patterns could be construed to mean conditions present after extensive timber harvest and aggressive fire suppression were initiated. Recommendation: "Pre-settlement conditions" and the "historical range of natural variability" may be more appropriate benchmarks for management, with the caveat that climate change may move some ecosystems outside those domains.

Response:

The Forest Plan has been adjusted in response to this comment and to clarify what is meant when a plan component refers to historic vegetation conditions. See the definition for "Historic vegetation conditions" in the Glossary.

Commenter: Canaca, Laura

Comment:

25 LRMP: 0 63 FW-Ve2-MC-MCFF-DC #15 Group sizes specified here may not capture the historic range of variability. Recommendation: a) Modify to allow larger groups where indicated by on-site evidences.

Response:

The desired condition has been clarified to address your comment. It now expressly acknowledges that group sizes in the mixed conifer frequent fire ERU may be larger than one acre when there is site specific information indicating that the group was larger historically. See FW-TerrERU-MCFF-DC-11.

Commenter: Canaca, Laura

Comment:

26 LRMP: p 55 FW-Veg-MC-MCFF-DC #16 Reference to "historic" patterns could be construed to mean conditions present after extensive timber harvest and aggressive fire suppression were initiated. Recommendation: "Pre-settlement conditions" and the "historical range of natural variability" may be more appropriate benchmarks for management, with the caveat that climate change may move some ecosystems outside those domains.

Response:

The Forest Plan has been adjusted in response to this comment and to clarify what is meant when a plan component refers to historic vegetation conditions. See the definition for "Historic vegetation conditions" in the Glossary.

Commenter: Canaca, Laura

Comment:

27 LRMP: p 63 Mixed Conifer with Aspen Description and DCs do not seem to completely capture aspen patches that occur as inclusions within the mixed-conifer type, from which it is desirable to remove encroaching conifers. Recommendation: a) Modify appropriately.

Response:

The Forest Plan has been adjusted in response to this comment. A new section has been created to address aspen and maple. A desired condition in this new section addresses these concerns. See FW-TerrERU-Aspen-DC-1. In addition, aspen has been added to a desired condition for Mixed Conifer with Aspen. See FW-TerrERU-MC-MCA-DC-5.

Commenter: Canaca, Laura

Comment:

28 LRMP: p 63 FW-Veg-MC-MCA-DC #1 Reference to "historic" patterns could be construed to mean conditions present after extensive timber harvest and aggressive fire suppression were initiated. Recommendation: "Pre-settlement conditions" and the "historical range of natural variability" may be more appropriate benchmarks for management, with the caveat that climate change may move some ecosystems outside those domains.

Response:

The Forest Plan has been adjusted in response to this comment and to clarify what is meant when a plan component refers to historic vegetation conditions. See the definition for "Historic vegetation conditions" in the Glossary.

Commenter: Canaca, Laura

Comment:

20 LRMP: p 54 FW-Veg-PP-DC #4 Reference to "historic" patterns could be construed to mean conditions present after extensive timber harvest and aggressive fire suppression were initiated. Recommendation: a) "Pre-settlement conditions" and the "historical range of natural variability" may be more appropriate benchmarks for management, with the caveat that climate change may move some ecosystems outside those domains.

Response:

The Forest Plan has been adjusted in response to this comment and to clarify what is meant when a plan component refers to historic vegetation conditions. See the definition for "Historic vegetation conditions" in the Glossary.

Comment:

RECREATION OPPORTUNITY SPECTRUM ARIZONA STATE LAND DEPARTMENT REVIEW COMMENTS I. State Trust land abuts the northern and eastern borders of this area along with a few parcels of State Trust land on the southwest border. The proposed designations along these borders impact approximately 58 sections of State Trust land. 2. The majority of the proposed designations affecting the State Trust land is Semi-Primitive Motorized (SPM). Motorized use is generally permitted. Access and motorized use through State Trust land is allowed only on designated routes permitted by the Arizona State Land Department. 3. Another designation shown that impacts this State Trust land is Roaded Natural (RN). Conventional motorized use is provided for in this designation. Although this designation is shown around various types of roads, the swath of the designation on either side of the roads is quite extensive. Access and motorized use through State Trust land is allowed only on designated routes permitted by the Arizona State Land Department. 4. The last two designations shown that impact this abutting State Trust land is Semi-Primitive Non-Motorized (SPNM) and Wilderness Pristine (WPS). In these designations motorized use is generally not permitted. Non-motorized access through State Trust land is allowed only on designated routes permitted by the Arizona State Land Department. 5. There are also approximately 57 sections of State Trust land that are within the forest boundary. The proposed designations impact these sections of State land. 6. The majority of the proposed designations affecting these interior sections of State Trust land is Semi-Primitive Motorized (SPM). Motorized use is generally permitted. Access and motorized use through State Trust land is allowed only on designated routes permitted by the Arizona State Land Department. 7. Another designation shown that impacts the interior State Trust land is Roaded Natural (RN). Conventional motorized use is provided for in this designation. Although this designation is shown around various types of roads and utility corridors, the swath of the designation on either side of these is quite extensive. Access and motorized use through State Trust land is allowed only on designated routes permitted by the Arizona State Land Department. 8. The last two designations shown that impact this State Trust land is Semi-Primitive Non-Motorized (SPNM) and Rural (R). In the SPNM designation motorized use is generally not permitted. In the R designation motorized use is permitted. Non-motorized access through State Trust land is allowed only on designated routes permitted by the Arizona State Land Department. Access and motorized use through State Trust land is allowed only on designated routes permitted by the Arizona State Land Department.

Response:

The modeling process to determine the Recreational Opportunity Spectrum of the National Forest System land within the Coconino NF considered neighboring non-National Forest System lands. This modeling effort was not intended to authorize motorized activity on those neighboring land. To remove the appearance that the Forest Service is applying ROS classes to non-National Forest System lands, the ROS map in the Forest Plan has been adjusted and it no longer displays any ROS class on non-National Forest System lands. See Map 12.

Commenter: Clark, Steve

Comment:

The AES cannot support further restrictions on access and dispersed recreation above what has already been analyzed and included in the Travel Management Plan (TMP). In fact we believe the TMP went too far. Primitive roads with light use contribute little negative affect on wildlife populations. There needs to be a balance of motorized use and protection. There needs to be an awareness by the Coconino National Forest that sportsmen/women need motorized access. The TMP resulted in an approximate 69 percent decrease in the miles of roads in existing and potential special areas (including special areas, wild and scenic rivers, and wildlife habitat management areas). Approximately 300 miles would be closed, the majority of which fall within proposed wildlife habitat management areas (240 miles). This would result in a decrease in habitat fragmentation as closed roads rehabilitate, which would improve resource quality (as stated in the TMP, FEIS).

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Comment:

The grazing suitability review identified allotments and portions of allotments that were closed prior to 1987 (prior to the implementation of the 1987 plan). These areas have remained closed over the life of the 1987 plan. These areas were closed for a variety of reasons and the suitability review did not identify any reasons to revisit the closures at this time. The closed or partially closed allotments include: o Allotments closed prior to 1987 (Camp Verde, Middle Verde, Montezuma, Rimrock, Cave Hill, Dry Creek); Portions of allotments closed prior to 1987 (Cottonwood, Cinder, Turkey Tanks, Deadman, Dove Tanks, Frisco Mountain, Hart Prairie, Tom's Creek, Indian Gardens, and Oak Creek); * The lands that are not suitable for livestock grazing according to the 1987 plan include: o Strawberry Crater Wilderness (USDA Forest Service 1987a. p. 110); Tundra and upper mixed conifer/spruce-fir slopes²⁵ within the Kachina Peaks Wilderness; Stoneman Lake basin (USDA Forest Service 1987a. p. 175); Cinder Hills OHV Area (USDA Forest Service 1987a. replacement p. 182); Oak Creek Canyon (formerly Management Area 14) (USDA Forest Service 1987a. p 187); Developed recreation sites and Snow Bowl special-use authorization area (USDA Forest Service 1987a. p. 190); Inner Basin (formerly Management Area 16) (USDA Forest Service 1987a. replacement, p 192); Oak Creek Canyon Research Natural Area (USDA Forest Service 1987a. new p. 196-1); Casner Research Natural Area (USDA Forest Service 1987a. new p. 196-1); Elden Environmental Study Area (USDA Forest Service 1987a. replacement p. 199); Old Cave Crater Environmental Study Area (USDA Forest Service 1987a. replacement; Griffith's Spring Environmental Study Area (USDA Forest Service 1987a. replacement; Right-of-way in the Highway 180 Travel Corridor (USDA Forest Service 1987a. new p. 206-4). * The final step of the comprehensive review of suitability for livestock grazing was reviewing decisions that have affected livestock grazing on the forest. This review identified the decision for the Verde River Comprehensive River Management Plan that excludes livestock grazing from portions of the Verde Wild and Scenic River corridor. This review also identified three grazing decisions that removed grazing from three allotments and two grazing decisions that closed portions of two allotments to grazing. Based on these decisions, the following areas have been identified as not suitable for livestock grazing: o Horse Mesa, Boynton Canyon, and Sedona allotments (based on the decisions signed on September 26, 1997, March 1, 2000, and July 1, 1998, respectively); Portions of the Buck Springs Allotment (as described in the decision signed on August 18, 2003); Riparian habitat in the Verde Wild and Scenic River corridor, unless site-specific NEPA analysis approved by the forest supervisor authorizes future grazing use (Verde Wild and Scenic River Comprehensive River Management Plan, signed on June 14, 2004. p. 20); South Newman, Walnut, and West Walnut Pastures in the Walnut Canyon Allotment (based on the decision signed on July 28, 2006).

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Clark, Steve

Comment:

It is not clear what additional road closures or changes to camping beyond what has already been decided under the TMP will occur. If additional restrictions to access are going to be proposed then this needs to be clarified in the FEIS. Recent planning under the Travel Management Rule identified an open road system and closed the forest to most cross-country travel. As a result, the road system should be the same for all plan alternatives and no additional roads or dispersed camping areas should be closed as a result of the Forest Plan.

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Commenter: Clark, Steve

Comment:

The AES does not support additional access restrictions to roads or dispersed camping as it appears to be proposed under Alternative C primarily within proposed Wildlife Habitat Management Areas (WHMA) (see WHMA discussion below). If further changes are proposed to the TMP by further restricting access under the alternatives to the Forest Plan then alternatives need to be crafted with your sister agency, the Arizona Game and Fish Department (AZGFD). As stated on page 672 of the DEIS, the Forest would work with AZGFD when making any modifications to areas identified as wildlife corridors however the Forest did not work with AZGFD when developing the WHMAs which are the areas requiring further access restrictions and changes to the ROS under Alternative C.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Clark, Steve

Comment:

The ROS is a management objective and provides a way of describing a variety of recreation opportunities. An inventory was conducted of the existing situation and then ROS were modeled based on the alternatives. There is a reduction of approximately 8,000 acres of roaded natural (less than 1 percent) and approximately 115,000 acres of semi-primitive motorized (about 6 percent) between alternatives B and C (DEIS, pg. 576). Most of this reduction is due to the proposed Wilderness (see Wilderness discussion below) and WHMA designations. The AES would like to support WHMAs if they prioritized and provided for greater on-the-ground habitat management but the current proposal does not do this. The AES disagrees with the need for further access restrictions (see WHMA discussion below) therefore we recommend that the areas be modeled as semi-primitive motorized instead of semi-primitive non-motorized to guide future planning.

Response:

The ROS modeling for Alternative C has not been adjusted as suggested. It is true that the ROS modeling for Alternative C reflects the presence of the management areas that emphasize reduced human-related disturbance. However, the presence of these management areas is not the only factor that is taken into account for ROS modeling, so simply reclassifying the areas modeled as semi-primitive non-motorized as semi-primitive motorized is not appropriate. Furthermore, such a reclassification is unnecessary. Neither Alternative B (modified) nor Alternative D include the management areas that emphasize reduced human-related disturbance. The ROS modeling conducted for those alternatives reflects the appropriate ROS classification to apply when these management areas are not considered in the modeling. Accordingly, the modeling for those alternatives will be used if the management areas that emphasize reduced human-related disturbance are not part of the Forest Plan.

Commenter: Clark, Steve

Comment:

The AES is not sure, based on what is outlined for Alternative C, that this alternative should even be titled, "Wildlife Habitat Management Areas". Language for Alternative C states that it responds to the issues related to noise disturbance and habitat connectivity for wildlife through the identification of WHMAs. Designation of an area as a WHMA would provide a low disturbance wildlife habitat for native wildlife species, allow for improved wildlife habitat (including habitat connectivity), and protect water quality and soil, vegetation, and water resources by limiting motor vehicle traffic (DEIS pg. 20).[...] Nothing in Alternative C provides direction for actively managing wildlife habitat. The proposed benefits for wildlife is based totally on removing all activities with motorized use through the creation of WHMAs and new wilderness areas and changing the old growth policy. It is questionable that Alternative C would provide any of the benefits being described by restricting motorized use further than what has recently been decided within the Transportation Management Plan.

Response:

Alternative C has been adjusted in response to these comments. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. One of the reasons for this emphasis is to benefit wildlife. One way that Alternative C responded to this concern was the inclusion of management areas that have an emphasis on reducing impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. These management areas unique to Alternative C included the term "wildlife habitat" in their name to help identify them. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Clark, Steve

Comment:

Habitat quality is the key for protection, restoration, and maintaining wildlife populations. There is no scientific evidence that further reducing motorized access will increase wildlife populations. However it is known that further reduction of motorized access will take away from recreational use for hunting and wildlife viewing and the AES cannot accept any further decrease in motorized access. We recommend that the emphasis for any proposed WHMAs be on actual management to restore and improve habitats (which the current proposal does not)

Response:

Alternative C has been adjusted in response to these comments. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. One of the reasons for this emphasis is to benefit wildlife. One way that Alternative C responded to this concern was the inclusion of management areas that have an emphasis on reducing impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. These management areas unique to Alternative C included the term "wildlife habitat" in their name to help identify them. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Clark, Steve

Comment:

The AES supports wilderness values but cannot support the designation of any new wilderness areas. The wilderness values being sought under this designation can be obtained through managing these areas under one of the primitive recreational opportunity spectrums or other types of non-wilderness designations. The Forest Service, in many respects, is paralyzed because of conflicting laws and regulations. Why would the Forest want to add another layer of restrictions when there are other appropriate means for achieving wilderness values? Many wilderness uses (deemed to be appropriate by the various government agencies) are being challenged preventing government agencies from being able to fulfil its resource management goals.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for

determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Clark, Steve

Comment:

The AES is concerned that new designated wilderness areas will increase risk to catastrophic wild fire and prevent adequate suppression efforts. The additional recommended wilderness areas and the Cottonwood Basin Fumeroles Botanical and Geological Area in alternative C constrain fire treatment due to increased coordination needs, logistical complexity (mainly access), a potential limitation in the type of fire management tools that can be used (e.g., hand tools instead of mechanized equipment like chain saws), and the need to mitigate activities and motor vehicle use in order to maintain wilderness character. Consequently, alternative C may result in fewer mechanical treatments, thereby potentially limiting fire treatment due to vegetative conditions that are more departed from reference conditions than more accessible areas outside of recommended wilderness (DEIS pgs. 653-654).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term

commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Clark, Steve

Comment:

at a minimum that any proposed WHMA be fully coordinated with the AZGFD especially as it relates to further access restrictions.

Response:

Alternative C has been adjusted in response to this comment. Alternative C responds to concerns that the forest plan revision effort needs to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance. The inclusion of "wildlife habitat" was not done to suggest that these areas were being designated as a "special area." Special areas are addressed in the Special Areas section in Chapter 3 of the Forest Plan. Naming the management areas in this manner has created confusion, so the term "wildlife habitat" has been removed from the names. These management areas are still located in the Management Areas section in Chapter 3 of the Forest Plan. Alternative C's emphasis to provide more primitive and natural settings with reduced human-related disturbance has been retained in Alternative C. Retaining these elements of Alternative C provide the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Clark, Steve

Comment:

Grazing The AES supports or agrees with many of the different sections of the proposed Forest Plan. A few of the highlights the AES supports are as follows: * Changes to Research Natural Area Direction in the Proposed Plan Guideline. Addition: Livestock grazing should be excluded from research natural areas unless grazing supports or would not affect the area's research purpose (Alternative C).

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Clark, Steve

Comment:

Having large stands of dense old growth has a higher fire risk and reduces the acres of open forest with a grassy or herbaceous understory. We don't understand why the Forest felt that the issue that drove Alternative C for old growth was really an issue. The concern was, old growth forest components are underrepresented on the landscape and were better provided for in the 1987 plan than in the proposed revised Plan. Evidently there was agreement within the Forest because this was one of the major drivers for creation of Alternative C. This was an issue that was put to rest with many years of research by Reynolds, Covington, and several other authors that resulted in every forest Plan in the Region being amended in 1996 to address not only old growth but ecosystem health. These amendments changed the way the Forest Service managed the forests by no longer having areas set aside as old growth allocations but instead managing for old growth across the landscape. As an example, under Alternative C the ponderosa pine PNVT direction is to add "In Ponderosa Pine PNVT, stands managed for old growth are at least 100 to 300 acres in size. In addition, ..." to FW-Veg-PP-DC-6 (DEIS, pg. 962). Similar language is being added to other vegetation types. This is contrary to a major amendment that were made to the Plan in 1996 which stated: "Refer to USDA Forest Service General Technical Report RM-217 entitled Management Recommendations for the Northern Goshawk in the Southwestern United States" for scientific information on goshawk ecology and management which provide the basis for the management guidelines. Distribution of habitat structures (tree size and age classes, tree groups of different densities, snags, dead and down woody material, etc.) should be evaluated at the ecosystem management area level, at the mid-scale such as drainage, and at the small scale of site. The distribution of vegetation structural stages for ponderosa pine, mixed conifer and spruce-fir forests is 10% grass/forb/shrub (VSS1), 10% seedling-sapling (VSS2), 20% young forest (VSS 3), 20% mid-aged forest (VSS4), 20% mature forest (VSS 5), 20% old forest (VSS6). NOTE: The specified percentages are a guide and actual percentages are expected to vary + or - up to 3%. The amendment (common to all Forest Plans in the Region) directed the amount of old growth to be across the landscape where old growth mimicked the pre-settlement structure described by Covington and others which were in small groups. This change was brought about by years of research by Reynolds, Covington, and others and is the best science. We find it strange that the Forest would not dismiss this concern that old growth was better represented by the 1987 Forest Plan prior to the time it was amended based on all of the science that has occurred. One of the most under represented vegetative structural stage is open conifer forest with a grassy or herbaceous understory. Old growth evolved in small dense groups with the forest being quite open which is not what is being proposed in Alternative C where 20% of the forest is allocated to old growth in dense stands, 200 to 300 acre in size.

Response:

Under Alternative C, the standards and guidelines for old growth set forth in the current 1987 plan, as amended in 1996, would be carried forward into the new plan. In Ponderosa pine and mixed conifer forests, the emphasis under the 1987 plan is placed on creating and maintaining large stands (100-300 acres) or large aggregations of contiguous stands that all have the full suite of old growth characteristics (1987 Plan, new page 70-2; 129; 138). The effects of this proposed plan direction is fully considered in the Vegetation and Fire Specialist Report (Forest Service, 2015). Generally, within the Ponderosa pine and mixed conifer forests, the 1987 plan direction would encourage a forest structure that does not match the historic condition or the desired conditions. Larger areas with a closed canopy and a more even-age structure would occur across the landscape. While this structure is not supported by the best available science that is specific to southwestern frequent fire forests (Reynolds et al. 2013), these standards and guidelines were carried forward into Alternative C in response to stakeholder input and to provide an opportunity to analyze the effects of incorporating these old plan components into the proposed revised plan.

Commenter: Crowley, Valerie

Comment:

The vast majority of people who visit the Coconino engage in quiet recreation activities like hiking, camping and birding. But lack of enforcement of motorized vehicle trails has led to increased degradation of our public lands. The Forest Service is not likely to receive additional funding or personnel to combat this issue, and so the new plan should not call for any more motor vehicle trails, and should curtail such activities in areas where misuse and lack of enforcement is known to be a problem.

Response:

The Forest Plan proposes to manage trails to provide a variety of opportunities, including motorized use. See FW-Rec-Trails-DC-1 and 2. Decisions on where to allow motorized use are guided by the Forest Plan, but are made at the project level based on site-specific information and analysis. An absolute prohibition on additional motorized trails is not being included in the Forest Plan. The Forest Plan includes direction for motorized recreation management and the potential impacts associated with motorized recreation. See FW-Rec-Disp-DC-1, 2, and 3, FW-Rec-Disp-S-1, and FW-Rec-Disp-G-1.

Commenter: Crowley, Valerie

Comment:

The U.S. Fish and Wildlife Service determined in 1996 that discretionary guidance alone in forest management jeopardized the existence of several species, including threatened Mexican spotted owls. At present 90 percent of native fish species in the Coconino, including the razorback sucker, loach minnow and spikedace, are federally listed as threatened or endangered. More protective requirements -- not fewer -- are needed to ensure they survive. The current forest plan incorporates many standards and guidelines to protect species such as the northern goshawk. But the new plan should additionally require implementation of formal recovery plans, rather than merely referencing them, and retain the existing binding standards and guidelines that were designed to ensure at-risk plants and animals are protected.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: Crowley, Valerie

Comment:

Past logging in northern Arizona has also destroyed most of the historic ponderosa pine and mixed conifer old-growth forests. But large, old trees are critical for the habitat they provide to wildlife and for their assistance in nutrient cycling and water filtration. Large, old trees can also help mitigate climate change by storing much larger quantities of carbon from the atmosphere. The new forest plan should require retention of large, old trees while also emphasizing old-growth recovery.

Response:

No change to the Forest Plan has been made in response to this comment. The Forest Plan emphasizes old growth structure throughout the landscape including old trees, and promotes replacement trees so that old growth is sustained over time. See FW-TerrERU-PP-DC-5, 6, and 9. Guidelines would protect old growth structure from uncharacteristic natural disturbances and develop it where lacking. See FW-TerrERU-PP-G-1 and 2. Guideline 3 in this same section provides guidance for retaining pre-settlement trees, often the largest, oldest, and tallest trees. See FW-TerrERU-PP-G-3. The plan does not preclude the use of the stakeholder developed Old Growth Retention Strategy at the project level.

Commenter: Crowley, Valerie

Comment:

And the plan should prohibit commercial timber harvests and road construction in recently burned forests for purposes other than public safety.

Response:

The Forest Plan has been adjusted in response to this comment. Although the Forest Plan does not expressly prohibit commercial timber harvest or road building as suggested, a management approach has been added to the All Ecosystems section reminding forest managers to focus on health and safety, restoration, and stabilization after large, uncharacteristic disturbances. The management approach states: Following large or uncharacteristic disturbance events, focus management actions on human health and safety, long term restoration, soil and watershed stabilization, restoration or protection of ecosystem processes and resource values. The Forest Plan contains other components that are designed to ensure that activities are consistent with the desired conditions for other resources. For example, the Forest Plan includes a guideline requiring timber harvest activities to be designed to be consistent with maintaining or moving toward ecological and social desired conditions. See FW-FProd-G-1. A similar guideline can be found in the Roads and Facilities section. See FW-RdsFac-G-1. Decisions on whether to conduct a commercial timber harvest or to build roads in a burned area are made at the project level based on site-specific information and analysis. Imposing such restrictions without consideration of specific circumstances could prevent the Forest from pursuing desirable restoration activities or require a plan amendment before those activities could be pursued.

Commenter: Crowley, Valerie

Comment:

Finally, livestock grazing is the most widespread and ecologically damaging use of national forest lands in the American Southwest. And climate change will only increase the intensity of grazing effects on soil, vegetation and wildlife. Substantial damage to vegetation and water resources already exists due to past grazing practices; the new forest plan should restrict the extent and intensity of livestock grazing to allow vegetation and aquatic ecosystems to recover, and it should prohibit grazing near rivers and streams.

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Comment:

The creation of new and expansion of existing wilderness areas in the CNF are in keeping with the NAAS overall goal of protecting critical habitat for wildlife and protecting wilderness for future generations of recreational users to enjoy.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: department@mormonlakefire.com, Anon

Comment:

As part of the Public Comment Process for the proposed Forest Plan Revision, the Mormon Lake Fire Department would like to go on record as supporting Alternative A (No changes) to the current Forest Plan[...] We feel this is public land and should therefore be accessible for recreation, hunting, fishing, etc. We have plenty of 'quiet lands' and do not feel it serves the public interest to shut off access to the forest.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: department@mormonlakefire.com, Anon

Comment:

Additionally, the potential for Wildland fire hazard is greatly increased, as numerous studies have shown, if our forest areas are not maintained. In order to respond to a Wildlands fire, we need access, as well as the roads that will allow us ingress and egress.

Response:

Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. The Forest Plan has several components that address access for fire management activities. A desired condition in the Roads and Facilities section seeks to provide reasonable motorized access to the public, city, county, state, and other federal entities for permissible uses, such as fire management. See FW-RdsFac-DC-1. A standard included in that section prohibits motor vehicle use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps. The standard includes an exception for those uses authorized by law, permits, and orders in connection with resource management and public safety. See FW-Rec-Disp-S-1. Desired conditions for the Wildland Urban Interface promote safe and efficient suppression and the protection of human life and property. See FW-WUI-DC-1 and 2. There are also management approaches in Fire Management to facilitate responses to wildland fire and address safety concerns and access: Coordinate with other jurisdictions such as communities, service providers (infrastructure), and Federal, State, county, and local entities regarding prevention, preparedness, planned activities, and responses to wildland fires. Notify the above regarding the upcoming and ongoing fire season and any prescribed fire activity. Coordinate access for initial attack and suppression activities with responsible jurisdictions to reduce response times and address public and firefighter safety.

Commenter: Donna, Bella

Comment:

To date the 21st century plan currently implemented by the Coconino National Forest for the Beaver Creek area is to close access and neglect environmental, recreational, and economic needs of the Coconino National Forest and the adjacent communities of Lake Montezuma, Rimrock and McGuireville. This is not working. The forest land is being damaged through increasing numbers of social trails and the safety and recreational needs of local residents are not being addressed. Recently Beaver Creek Camp Ground was closed to overnight camping without a comment period from the public. This type of action does not help with community relations. Our organization has a trails plan. We need Coconino National Forest support to help get a safe, marked, multimodal trail system in place. This will benefit both the environmental needs of the surrounding forest, the recreational needs of residents, and be of economic benefit to Yavapai County. The Beaver Creek area must become a priority for a trail system now. Prohibition and neglect do not work!

Response:

The Forest Plan has been adjusted in response to these comments. Desired conditions have been added to the Verde Valley Management Area that guide trail system design. See MA-VerdeV-DC-2 and 3. Also, several management approaches have been added to the Verde Valley Management Area to remind forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Comment:

The alternatives include more restrictions on dispersed camping, motor vehicle travel, recreational shooting, and additional area closures. All of these restrictions have a direct impact on the ability of the Coconino County Sheriffs Office to provide accurate information requested by the public, especially after business hours and on weekends when the public calls our office because they are unable to get in touch with a USFS representative. No consultation was conducted with the Coconino County Sheriffs Office by the Coconino National Forest during the plan development. Suggestion: Although the planning process is nearing its conclusion, there still are impacts of the forest policy on a broad base of stakeholders, especially those having legal responsibility, public information responsibility, or public safety roles on those forest lands. During the implementation phase of the plan, collaboration with these stakeholders would be beneficial in providing public education, community understanding, and compliance.

Response:

The general direction associated with education has been grouped into the Interpretation and Education section. Desired conditions in this section seek to have well informed visitors through a variety of strategically located interpretive facilities and/or efforts. See FW-InterpEd-DC-1 and 2. These efforts would include information boards provide recreation maps and visitor information which may include site-specific interpretation, trip preparedness, ethics, seasonal information, and restrictions or closure. See FW-InterpEd-DC-3. These communication efforts would be designed to show respect for the diverse backgrounds and needs of visitors. See FW-InterpEd-DC-1. Providing forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions is also a goal of the Forest Plan. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts. Collaborate with volunteers, other agencies, and stakeholders to promote interpretive efforts both on and off the forest. Several All Recreation management approaches also address the need to work together to educate forest visitors on forest management. These management approaches remind forest managers to: Collaborate with state and federal agencies including National Park Service, Arizona State Parks, AZGFD, concessionaires, chambers of commerce, nonprofit organizations, Northern Arizona University, state, city and county governments, recreation stakeholders, local communities and citizens, partners and volunteers regarding provision of recreation opportunities in Northern Arizona and communicating these to the public. Work in partnership to find creative solutions to operate and maintain recreation sites, trails and trailheads, and provide interpretive and environmental education. Determine gaps and overlaps in opportunities and resolve conflicts between users, and providers. Work together to determine activities that increase our capacity to serve a diverse population while promoting social, economic and natural resource sustainability. Coordinate with the AZGFD and other stakeholders to provide a network of wildlife viewing opportunities. Coordinate with the AZGFD to provide fishing access to meet goals and objectives of the Arizona Cold Water Fisheries Strategic Plan. Collaborate with the AZGFD, local law enforcement, and other stakeholders to address issues and opportunities related to recreational shooting on the Coconino National Forest.

Commenter: Driscoll, Jim

Comment:

Signage on forest roads should be clear and consistent among all forests in AZ. All roads that are closed should be consistently marked as "closed." All other roads would be considered "open."

Response:

Several adjustments have been made to the Forest Plan in response to these comments although no standard was added. A guideline that requires boundaries and routes to be clearly and uniformly identified has been added to the Dispersed Recreation section. See FW-Rec-Disp-G-1. The Forest Plan also has a desired condition and a guideline to provide visitors to the forest with properly placed, clear signs and information on authorized motorized use and restriction. See FW-InterEd-DC-5 and FW-RdsFac-G-3.

Commenter: Driscoll, Jim

Comment:

The size of the "Draft Land and Resource Management Plan for the Coconino National Forest" along with the "Draft Environmental Impact Statement" (three volumes) is much too complex and difficult to navigate for many people not in the land management business. The use of acronyms and references throughout the documents make it very difficult for the lay person to find, understand, and utilize the information. Suggestion: Format the plan in a fashion that is easier to understand with more thorough summary of the Plan Alternatives, comparisons of the alternatives, and specific descriptions of changes from existing policies.

Response:

Several changes have been made to the revised Plan to make it easier to understand and use. The descriptions of the various plan components in Chapter 1 of the revised Plan have been edited to make these concepts easier to understand. Plan components were adjusted to remove subjectivity and ensure consistent interpretation and application by a variety of users. Plan components particular resources were integrated and organized in their appropriate sections. For example, plan components related to soils were gathered from other sections of the revised Plan and organized in the Soils section. In Chapter 3 of the revised Plan, management areas were adjusted to remove overlapping guidance. Additional editorial effort has been added to the environmental impact statement as well. The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Driscoll, Jim

Comment:

Dispersed camping/parking standards should be reasonable and provide for safety, welfare, and comfort of forest users by allowing for camping/parking up to 300 feet from open forest roads.

Response:

No change has been made to the Forest Plan in response to this comment. Authorizing motorized camping in particular areas is not a plan-level decision. This concern is addressed under the Travel Management Rule, in travel management planning.

Commenter: Driscoll, Jim

Comment:

Camping should be allowed at all sites showing an established history of use including those camp sites on minor access roads connected to open forest roads.

Response:

The Forest Plan does not authorize or mandate any site specific projects or activities; therefore it cannot authorize camping or parking as requested in the comment. Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. The Forest Plan contains plan components that will help guide decisions on dispersed camping and parking. See FW-Rec-Disp-DC-2 and 4, MA-LongV-DC-2 and 3, and management approaches in the Dispersed Recreation section, which state: Establish long-term partnerships with recreation organizations to help plan, construct, and maintain motorized and non-motorized recreation opportunities and foster a low impact conservation ethic. Coordinate with city, county, state, and other agencies to manage motorized recreation and reduce cross-boundary conflicts.

Comment:

There is an obvious lack of hunter related participation and reference throughout the "Draft Land and Resource Management Plan" and the "Draft Environmental Impact Statements." The tens of thousands of hunters utilizing the forests in Arizona should contribute more to helping plan for the future use of our National Forests. Although many hunter conservation groups were listed as being contacted, it is questionable whether they were really provided adequate opportunity to participate or have representation during the planning process. Suggestion: Utilizing the broadest range of individuals as advocates and allies in resource protection and forest use would provide a great benefit to the land managers. Realistically, among every group of forest users there are a few who engage in illegal activity or resource damaging activities; however, there are greater numbers of people who value their forests and access to it. Hunting goes hand in hand with healthy land management, and hunters can be an asset to forest lands and of assistance to land managers. The largest group of recreational users in the forest is hunters. Greater efforts should be made to involve them in helping to determine the future of our forests.

Response:

There are over 1600 entities on the forest plan revision mailing list. Some groups on the mailing list are affiliated with or support hunting including Arizona Sportsman for Wildlife Conservation, the National Rifle Association, Rocky Mountain Elk Foundation, Arizona Elk Society, and Arizona Game and Fish Department. We assume many individuals on the mailing list hunt as well but they may not have specifically identified themselves as hunters. All comments received from the public were read and considered and many comments resulted in modifications to the forest plan. Hunting and other wildlife related recreation is specifically mentioned in General Description and Background for Constructed Waters, Wildlife, Fish, and Plants, Recreation, and the following management areas: San Francisco Peaks, Anderson Mesa, and House Mountain-Lowlands. Desired conditions in Dispersed Recreation, and the Pine Belt, Anderson Mesa, and House Mountain-Lowland Management Areas emphasize hunting and promote abundant and high-quality opportunities for hunting and other wildlife-based recreation opportunities. See FW-Rec-Disp-DC-5, MA-PineBelt-DC-2, MA-AMesa-DC-2, and MA-HouseMtn-DC-1. The Forest Plan contains several components that acknowledge the value of collaboration with organizations and individuals to provide better protection for forest resources. The Wildlife, Fish, and Plants section contains a desired condition for residents and visitors to appreciate, learn, and have ample opportunities to experience, appreciate, and learn about the wildlife, fish, and plant resources of the forest. See FW-WFP-DC-10. Through numerous management approaches, the Forest Plan encourages forest managers to work with partners to achieve a wide variety of outcomes, including: protection of caves, karst, cliffs, and talus slopes and their associated resources (see FW-BioPhys-Geo); management and monitoring of bat roosts (see FW-BioPhys-Geo); inventorying, classification, assessment, and prioritization of springs and recharge areas for restoration, and to implementation of restoration activities (see FW-Rip-Spr); identification and development of concepts, tools, and research opportunities applicable to ecosystem restoration and vegetation management (see FW-TerrERU-All); grassland restoration, grassland connectivity, and education (see FW-TerrERU-Grass); reduction of the risk of uncharacteristic fires that are hazardous to values in the wildland-urban interface (see FW-TerrERU-IC); coordination on information, education, and knowledge gaps as they relate to promoting and improving wildlife, fish, and plant resources and management (see FW-WFP); opportunities for partnerships and volunteerism in all heritage program elements (see FW-Hrtg); documentation, preservation, interpretation, and management of heritage sites and evaluation and development of creative management opportunities (see FW-Hrtg); provision of recreation opportunities in Northern Arizona and communication of these to the public (see FW-Rec-All); identification of creative solutions to operate and maintain recreation sites, trails and trailheads, and provide interpretive and environmental education (see FW-Rec-All); identification of gaps and overlaps in opportunities and resolution of conflicts between users and providers (see FW-Rec-All); determination of activities that increase the Forest's capacity to serve a diverse population while promoting social, economic and natural resource sustainability (see FW-Rec-All); and assistance with planning, construction, and maintenance of motorized and non-motorized recreation opportunities and the fostering of a low impact conservation ethic (see FW-Rec-Disp).

Comment:

Thankfully the Forest decided to keep the Antelope as a MIS. We are also pleased that in the desired conditions for the Great Basin and Montane/Subalpine Grasslands, page 43 of the draft plan at #1 speak to "Vegetation height, density and cover to support the historic fire return interval, where fire played a role, while providing food and cover for wildlife species including pronghorn. We strongly encourage the DC be edited to include wording similar to that proposed in the Kaibab Plan; ? "Understory height provides cover for pronghorn fawning, small mammals foraging and songbird nesting, typically averaging 15 inches in height, ..." ? "Understory composition is within the natural range of variability and contains diverse native herbaceous plant species that provide nutrition for pronghorn and other species. Depending on soil type, ground cover typically averages 50 percent live vegetation and 50% non living vegetation, with vegetation composition averaging 40 to 60 percent grass, 10 - 30% forbs and 5 to 20% shrub." The DC proposed for the Grasslands when combined with the detail from the Kaibab will be major steps forward to getting the grassland ecosystems on the CNF back to a more natural condition and natural function.

Response:

The Forest Plan has been adjusted in response to this comment. A management approach has been added to the Grasslands ERU section reminding forest managers that: Species-specific wildlife needs are addressed on a site-specific basis and considered during project level planning and implementation. For example, where they occur, pronghorn typically benefit from grasses and shrubs greater than 11 inches in height to provide fawns protection from predators during the fawning season (AZGFD 2011). This habitat consideration is, however, dependent in large part on weather and site capability. Optimal fawning habitat conditions may not always be achievable due to variable environmental conditions (e.g. winter snow fall and spring precipitation). Project specialists work together to determine achievable conditions that would optimize wildlife habitat at the site level, and give consideration to follow up monitoring that could assess how well such conditions have been met. The Forest Plan contains additional direction that is beneficial to pronghorn fawning. See FW-ConsWat-DC-2, FW-TerrERU-Grass-DC-8, and FW-WFP-G-13.

Comment:

Given this is the second Forest Plan, with the first / current plan - directing management spanning over 27 years with 24 amendments, we were surprised and dismayed not to find a comprehensive summary / discussions to just how well the first Forest Plan worked, describing the good / improvements to the lands and resources of the Coronado NF as well as any "hoped for improvements" which did not work-out as planned. One would have thought that with the Forest investing the resources to develop a 1,000 page Draft EIS, 28 specialists reports and supporting documents as well as a 260 page Draft Plan that some of those resources could have resulted in a report to the accomplishments of the first plan. We were hopeful to find detailed information to such questions as: ? Were the Desired Conditions, (DC) put forward in the first plan achieved or not ? We were anticipative; o there would be specificity to each of the habitat types or Ecosystem Management areas on the Forest. o A detailed explanation to what management system was used to obtain the DC. ? If not, why not. ? Did soil conditions improve or did they decline; o Is there more litter on the soil surface today, the same or less ? o Was there an Improvement in the abundance and distribution of small plants, desired species of grasses and forbs, today is it the same as then, (planning period of first plan) or less ? ? Was there an improvement, static or decline in watershed conditions, ? Was soil erosion reduced, static or increased ? It is well know and an widely accepted practice for any planning process to be useful tool, especially in a modification / update / coarse correction to management for another 10 - 25 years, the successes as well as the failures of past plans and management must be analyzed and clearly understood to know "was the goal achieved or not" and in either case Why or Why Not ? It is very important for the Agency as will as the public to learn from Success as will as Failures. The draft Plan nor DEIS contain any of this important information. Taking a page from the Agencies / Region 3 Integrated Resource Management Method September 1993, in order to best function a Forest Service project there are four basic steps; ? Plan ? Control / Manage ? Monitor ? Adjust Management as needed ? Control / Manage It must be noted that issues identified as needing to be corrected in the first Plan and EIS for the conditions that were present as a result of Forest Service administration for past (approximately) 100 years which were to be corrected through improved management and "current / best science" as outlined in the first forest plan. Today, some 27 years later we see that most if not all of those same issues still exist today. About 3 years into the new (first) plan it became quite clear that the first forest plan was nothing more than a codification of historical management. Review of the proposed draft plan, due to the lack of any specificity and details such as Standards and/or Guidelines, other than the date of publication it looks pretty much like the first plan. Wonderful sounding Desired Conditions - pages 15 through 116 lack any details which provide the public any assurances to when those improvements will actually be achieved at any time in the future, if ever ? Without any factual - detailed information to how well the first / current Forest Plan has worked solving the problems identified at time of its development, what assurance if any dose the public have that the issues identified in this second DIES & Plan will be resolved or is this second Plan just another ruse to kick the issue down-the-road again for another 25 - 30 years to "perhaps" be dealt with in a third plan, if indeed there is a third plan?[...] We request the Coconino NF provide a comprehensive summary of its first - current plan that would include details to soil conditions and improvement, conditions of the small plant community - grasses and forbs, are they increasing or decreasing in abundance and distribution, and water shed conditions. Further a factual explanation to how funding will effect the outcomes / accomplishments for alternatives presented.

Response:

In preparation for plan revision, the Coconino NF identified guidance in the 1987 plan which is working, new conditions which need to be addressed, and ongoing challenges which could be better addressed. This preparatory work is documented in the "Analysis of the Management Situation," which was completed in May 2010 (USDA Forest Service 2010a). Through the "Analysis of the Management Situation," the Coconino NF identified current ecological and socioeconomic conditions and trends taking place on the forest and the associated "needs for change" to be addressed in the revised plan. The needs for change are grouped under three broad revision topics: (1) recreation, (2) forest community interaction, and (3) maintenance and improvement of ecosystem health. See the Needs for Change section in Chapter 1 of the environmental impact statement and the Analysis of the Management Situation for additional information.

Commenter: Erman, Rick

Comment:

Another very disturbing issue with this proposed DEIS and Plan is the movement by Forest Service per se away from the original intent and direction of the National Forest Management Act of 1976. The first / current Forest Plan was/is an integrated document addressing the all the various functions that make up a "Forest" and its "operation, which includes; Range, Timber, Water, Minerals, Wildlife and Recreation. This First Plan was the first time the public was encouraged to participate in a process with the Agency to have the various functions of the FS work together in an integrated method putting the needs of the lands long-term sustainability the primary goal and objective. Support for that direction can be found in the document produced and published by the RO, Integrated Resource Management - The Road to Ecosystem Management. Our copy is the 4th edition printed in 9/1993. The RO was so enthused with this message and method they sent teams to each NF in the Region to work with FS personal and active publics to teach and preach "the system". Jim Crawford and Ron Sein were most prevalent in Arizona. Today in this second Plan we see that integrated ecosystem management is now nothing more than an old word phase to be tossed about, reality is showing us that the old school functionalism of the pre-1990's is again the norm in the Agency. Today the public must deal with four major documents interacting with the Coconino NF; ? Travel Management - deals with controlling human use of the Forest, that function historically was called Recreation. It is important to not here with the implementation of this "plan" the negative impacts from humans brought forward in the DEIS and Plan will be greatly reduced. ? The Forest Service Handbook, (FSH) - the out of public view set of mandates of "how to do things the FS way". Truly amazing in this day with all the use of NEPA that the Agency proclaims to how it does business in a transparent manner uses this "how to do" manual. Further amazing is the way in which this document was developed internally without any consultation or input from any public, sister Agencies or academia and even though it "touches and directs" most every project on the Forest's is was / is not vetted through the NEPA process. Anyone who has interacted with the FS knows this manual drives the day to day operation of the Agency. One specific example is the Agency use of 2209 Chapter 90 - livestock grazing. ? The New Plan - dealing with the other parts not covered by or which be subservient to the others above. ? 4FRI - deals with vegetative modifications, that function historically was called Timber. The public has not idea to; ? how these documents will be integrated? ? which of these documents will be the primary document? The Coconino NF must provide the public a detailed explanation to: ? Why the documents are not integrated into the proposed Forest Plan, and given they are separate ? How will these 3 separate documents be integrated specific to projects, and ? Which of the 3 documents is to be the primary document?

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to

it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Commenter: Erman, Rick

Comment:

Another major question to grazing by domestic livestock and Alternative Development, be it an AMP or a Forest Plan; Why does it have to be All or Nothing ? How was it determined by the Forest given the input through scoping for the new plan as well as the long history, (years) of projects - AMP's that grazing of domestic livestock - a Non Native species, was not important enough to develop at least one if not more alternatives which honestly looked at a reduction in livestock stocking levels of say 25% and another at 50% of current, showing the public those impacts on soils, plants, watershed / erosion, fire and wildlife ? After review of these new documents we see clearly, again, just as in the first plan a primary thrust by the Forest Service is to maintain the highest stocking rate possible even though; ? Grazing by domestic livestock has been a primary controversy for at least the past 50 - 75 years, ? Grazing by elk has become a primary controversy not only competing with livestock but native species as well. ? Both domestic livestock and elk are a non-native species; o Livestock (in large numbers) were introduced to the CNF in the period of the Second Migration West 1865 to 1875. Forest Service and common historical knowledge. o Elk were introduced to the CNF 1914 - 1921. Game and Fish data. ? Factually there was not a heavy bodied bovine / grazing animal which evolved within the ecosystems of the Coconino for the past 10,000 years, see Hoffmeister 1986. ? The number of scientific papers detailing the negative impacts directly and in-directly to native; soils, plants, hydrological systems, fire and wildlife is legion. ? The FS or the Region or the Coconino NF does not have one shred of site or ecosystem science specific to the Forest to support such an activity as being ecologically necessary or valid - such as cows being a replacement for bison. Extensive research and FOIA requests have failed to find one study. ? The question of Capability of the area of consideration to support the use of domestic livestock and elk at any stock level or period of time was not / has not factually vetted through NEPA. Be it o Pre the current forest plan, o During the process of development of the current forest plan, o Post the current plan in the development of projects such as AMP's o Nor in this Draft Plan & EIS.

Response:

The "Alternatives Considered but Eliminated from Detailed Study" section in chapter 1 of the EIS states, "A no grazing alternative would not meet the legal direction of the National Forest Management Act or Multiple Use-Sustained Yield Act which direct that forests will be managed using multiple use, sustained yield principles." The Multiple Use-Sustained-Yield Act (MUSYA) of 1960 (section 1) states that, "the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." The National Forest Management Act (NFMA) (section 6(e)(1)) states that in revising plans, "provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use, Sustained-Yield Act of 1960, and in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness..." The forests are managed for range (livestock grazing) consistent with NFMA and MUSYA. These laws do not require livestock grazing when/where ecological conditions are not appropriate. The plan is designed to manage for ecological desired conditions, as well as social and economic desired conditions (including uses such as livestock grazing, harvest of forest products, and recreation).

Comment:

Trying to find any factually, site or ecosystem specific science to support the Forests finding in its first plan of Capability, none can be found. Further request for such detailed / specific information to the Forest was turned into a FOIA, which was never fully functioned by the Forest. The only statement then and now - Grazing Capability and Suitability, are based on landscape scale conditions such as landform, geology, slope and climate. Indeed if science and fact based management were to be used by the Forest to insure long-term sustainability, (as directed by NFMA) there would be a much more detailed analysis than four of the macro considerations to determine the grazing Capability as stated in the 1982 and current draft plan.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled "Determination of Lands Capable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled "Determination of Lands Suitable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

From the RO, we learned that lands producing 100 pounds per acre or greater are capable of supporting domestic livestock can be found in the R-3 1999 revised edition of the "Range Analysis and Training Guide". ? On October 3, 2011 in response to FOIA's on all the Arizona Forests for information to obtain the science establishing this standard, an email from Dave Stewart, imbedded below; "Rick, I don't know who Daryl Stewart is but your note here has been referred to me. For well over 40 years that I am aware the Region has used various factors, one of which is estimated pounds of forage per acre to assist in estimating the utility of various lands for livestock use and production. Right off hand I don't know of any "scientific paper" related to the "100 pounds (of forage) per acre" you refer to. As used in the document you reference, this is not a "hard and fast" figure but rather a general guideline to assist forest personnel in classifying rangelands as to their relative capability to produce forage for use by domestic livestock. As determined locally, and depending on circumstances, forests have the option of modifying the "100 pounds" of forage per acre depending on what makes sense for site-specific circumstances. Regardless, rangelands classified as "potential capacity" or even "no capacity" does not imply these lands do not contribute in some limited way to the forage base for domestic livestock for in some circumstance they certainly can and do. I am also aware you have apparently sent a similar e-mail direct to national forests in AZ. Please consider this the clarification you are seeking on behalf of all AZ National Forests. Dave Stewart Director. Rangeland Management Clearly and Factually 1. Findings from studies of just plants in ecosystems not found on the Coronado NF 2. A standard set by the RO, again without any reference to site / ecosystem specific science 3. A historical view - "how we have always done it" We Are the Forest Service, We say its OK to graze cows and elk, Therefore its OK to graze cows and elk, No Site Specific Science Necessary ! When considering the statement of Capability for the use of domestic livestock made for the 1982 Forest Plan, determination of capability to support domestic livestock use was modeled during one of the wettest periods ever recorded in the State, the 20th Century Wet Period - 1979 through 1995. It must be noted that the proceeding 59 years composed the Mid-Century Drought and now the following 18 years of drought - the Early 21st Century Drought (names and dates of the wet and drought years from NOAA). We request the Forest develop two alternatives which factually analyze the impacts of at least a 25% and 50% reduction in domestic livestock actual stock numbers. Not permit numbers - those animals put on the land annually.

Response:

The Forest Plan does not specify the actual amount of livestock grazing (stocking) that could occur on the Forests. Stocking decisions (amount of livestock grazing authorized) for specific grazing allotments are beyond the scope of the plan. Grazing is authorized through term grazing permits (a long term authorization subject to forestwide standards and guidelines) and an annual Bill for Collection. The annual level of livestock grazing can be reduced or adjusted in response to any site specific resources conditions within any grazing allotment under the terms and conditions of the term grazing permit. Changes to the permitted livestock numbers authorized by a term grazing permit would be made through project-level analyses. Those projects would be guided by Forest Plan components designed to protect other species and their habitats. A guideline in the Forest Plan requires livestock grazing to be managed to meet, or move towards, the desired conditions for forest resources such as soil, water, vegetation, and species. See FW-Graz-G-2. As required by the 1982 Planning Rule, the Forest reviewed the capability and suitability of domestic livestock grazing on the Forest. Additional information on the grazing capability and suitability determinations is available in the Livestock Grazing section in Appendix C of the environmental impact statement and in the Appendix I of the Rangeland Specialist Report. Based on this review, the Forest determined that 1,390,598 acres on the Forest are Lands Potentially Capable for Livestock Grazing. The Forest further determined that 1,308,276 acres on the Forest are Lands Potentially Capable and Suitable for Livestock Grazing. These determinations indicate that a large portion of the Forest is capable and suitable for domestic livestock grazing. As discussed above, decisions on actual stocking levels for any particular part of the Forest are made at the project level based on site specific information.

Comment:

The one reference to percent slope is on page 167 of the Draft Plan which states that capable lands for grazing are those with 40% slope. The other draft plans for the NF in AZ reviewed this far use a maximum slope of 40%, that recommendation is from the RO, with it rational based in the text book; Range Management - Principles and Practices, Jerry L. Holechek, Rex D. Pieper and Carlton H. Herbel, Pearson / Prentice Hall, the third edition 1998 and/or the fifth edition 2004. Both editions have the same chart showing Table 8.10 in both editions "Suggested Reductions in Cattle Grazing Capacity for Different Percentages of Slope" Percent Slope Percent Reduction in Grazing Capacity 0-10 none 11-30 30 % 31-60 60 % over 60 100 % Noting that Holechek speaks to a graduated value while the FS is once again all or nothing, and yet again with no habitat / ecosystem specific science to support that position. We ask the Coconino NF please provide in the next Forest Plan and EIS a chart or detailed explanation to the percent slope and an associated grazing capacity.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled "Determination of Lands Capable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled "Determination of Lands Suitable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

Open water is absolutely essential to support domestic livestock and elk. Cows are totally dependant upon adequate open water to survive as are elk and there would be very little grazing by either speices given the arid environment of the ecosystems of the CNF. Review of the Draft Plan and DEIS we found no qualifications in for the CNF in determining which land(s) have the capability / suitability for livestock and elk grazing linked to Distance from Water. With Dr. Holechek as a primary expert and reference source for the Regional Range program and grazing in general for the west, we are surprised that his direction for capability values linked to distance from water is not used in Region 3 or on the Coronado NF as are his recommendations for production and stock rates? From Range Management Principles and Practices, 5th edition, page 238 Distance From Water Miles % Reduction in Capacity 0 - 1 None 1 - 2 50% 2 100% - Ungrazable Clearly water is important to ecosystem function and to non-native grazing animals; livestock. Native species evolved and adapted to living with little open water, however cows are totally dependant upon open water. Holechek, the FS in general and the Coronado NF do not want areas overgrazed by livestock, them congregating adjacent to water sources. Further all strive for long term sustainability. We must ask why the Agency does not use distance from water as primary criteria in determining lands capable of supporting herbivore by non-native species only relying on slope and production. Looking at the references noted by Holechek - Range Management Principles and Practices, 5th edition , Cook did not provide any specificity to slope, however he did speak to there being "21 independent variables" that should be analyzed to determine utilization by livestock and that "no one factor could be used as a reliable index." The public needs to know why the other key factors of; ? food and hiding cover for wildlife ? distance from water ? amount of litter ? amount of bare soil ? erosion rates ? current plant composition, abundance and distribution as compared to historical and/or potential ? fire are not given equal importance by the Forest Service. We ask the Coconino NF please provide the sighting of ecosystem specific, scientific papers / studies which analyze the impacts to native plants, wildlife, hydrological systems, soil conditions, natural fire systems and watersheds from the removal of (approximately) 50,000 tons of forage and 30 million gallons of water annually.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled "Determination of Lands Capable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled "Determination of Lands Suitable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within

the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Draft

Comment:

Moisture is another very important key aspect not analyzed at any detail in the DEIS, only mentioned as a high level possibility of climate change. Further moisture cycles were not considered in the first - 82 Plan & EIS, to the determination of suitability and capability for grazing of non-native species. The planning period for the first / current plan was conducted during the period "The 20th Century Wet Period", 1979 through 1965, one of the wettest periods recorded in Arizona. Today and since 1986 Arizona is in a period of drought called "the Early 21st Century Drought". Some experts on the Climate of Arizona / southwest claim this is one of the driest periods in recorded history, almost as bad as the Mid-Century Drought, 1942 - 1978. The term recorded relates to human measurements as well as tree-ring data. Given the only published criteria as capable for use by domestic livestock is the production of 100 pounds of forage per acre, and given that criteria was established in the wettest period ever recorded in time for the area under consideration in these documents, how can the same determination of suitability and area of use be considered suitable in periods of drought ? The following table is a summary of precipitation data collected at NOAA sites from four locations on or directly adjacent to the CNF. Location Period 1979-1995 1996-2013 wet dry inches of moisture above or below mean Flag AP - WSO 87.89 -41.39 Walnut Canyon 27.74 -12.37 Blue Ridge -8.38 -58.96 Montezuma Castle 47.03 -10.76 The amount of difference between volumes of moisture between the very wet years of 1979 through are strikingly different than the dry years of 1996 to current. The lack of long-term moisture often called Drought has a major impact to "the land" and all the elements that are directly linked to the land to exist. For the CNF / Forest Service to continue to ignore there is a drought and to use the same criteria to operate as if there moisture is not vitally important is simply malfeasance. The Coconino NF must analyze and provide to the public the effects of mid to small scale climate change, wet periods to that of drought periods. How these changes in moisture regimes effect the ecosystems on the Forest as well as the key elements within those ecosystems,,,,, AND the effects of herbivore by non-natives in both the wet as well as drought periods.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled "Determination of Lands Capable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled "Determination of Lands Suitable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual

grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Commenter: Erman, Rick

Comment:

Not found in the draft Plan is any definition of drought or any substantive actions that will be taken if there are drought conditions. The last document specific to drought we saw from the Region spoke to there was no drought until the Standard Precipitation Index was a -1 for 12 consecutive months. Choosing the SPI and creating the criteria for at least -1 for 12 consecutive months was a very smart move by the Agency to totally take away any chance of having to deal with drought issues from the Public. In fact it sets the stage for the Agency to say there is no drought, (by their standards). After review of the facts its all but impossible for the value of -1 to be consistent for any extended period of time. Reference of the SPI data for January 2014 back 72 months make this point crystal clear, <http://www.wrcc.dri.edu/cgi-bin/spiMAIN.pl?0202+spi1+spi12>. The lack of a valid drought index and development of standards of operation in a period of the worst drought recorded clearly and simply points out the Malfeasance of the Coronado, R-3 and the Agency as a whole to protect and insure the long-term sustainability of the lands under their administration. It is well documented by NOAA that Arizona has been in a drought for the last 18 years. Discussions with the professionals' who produce the Drought Monitor of the National Climate Data Center, a division of the Department of Commerce, working closely with NOAA feel the SPI is not a good tool to use to determine drought and the severity of the drought. Four reasons given ? The SPI is a lagging index at best 4 weeks, sometimes longer ? The SPI only looks at precipitation. ? Hard to understand the data ? Area of value set covers a very large area - unit of land, one major moisture event in an isolated area can drastically skew the rating for the entire unit. They feel they have a much better product; ? The information is current, only lagging one week ? An easy to understand rating system, color coded by level of drought o D 1 - Moderate o D 2 - Severe o D 2 - Extreme o D 4 - Exceptional They produce a map weekly which shows county boundaries with the different levels of drought, in color, superimposed on top making it very easy to find the drought rating for a specific location. The Drought Monitor takes into account a number of drought indexes with varying weighted values; o 35% - the Palmer Z o 25% - the 3 month precipitation o 20% - the 1 month precipitation o 13% - CPC soil moisture model o 7% - Palmer Drought Index http://droughtmonitor.unl.edu/DM_state.htm?AZ,W Arizona Department of Water Resources also has drought information and maps, it appears they work with the DM folks, the product shown on the AZDWR web site looks very similar to the DM product. <http://www.azwater.gov/azdwr/StatewidePlanning/Drought/DroughtStatus2.htm> Given the negative impacts of drought, the number of references to drought in the new DEIS and proposed Plan to historical, current and real potential for this drought to continue as well as future droughts, its time the Coronado develop its own drought policy. The policy must address both; what is a drought, what resources were used to determine the severity of the drought AND then what actions the Forest will take to insure harm is not inflected to the various ecosystems on the Forest from those impacts it can control, IE; humans and domestic livestock. The Coconino NF must; ? Commit that drought is a major negative impact on the lands it administers, and ? Develop a real drought policy and put it in the new Plan. The drought policy would use the latest and best scientific resources; we strongly urge the Forest use the Drought Monitor. This policy would be used in a proactive approach rather than a subjective approach based on professional opinions leading to arbitrary decisions.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest already has a drought policy in the Region 3 Supplement to Forest Service Handbook 2209.13, 19. The drought guidelines found in that section are agency policy that applies to the Coconino NF. A reference to this policy has been added to the Forest Plan in the Livestock Grazing section in Appendix D, Other Sources of Information.

Comment:

Provide a DFC that specifically speaks to adequate hiding cover of 15 inches in known and historic antelope fawning areas that will not be compromised by the direction of FSH 2209 Chapter 90[...] There is strong scientific support for the proposed Desired Conditions of providing hiding cover for wildlife and a robust small plant community from the book "Pronghorn Ecology and Management", Bart O'Gara and Jim Yoakum, University of Colorado Press, 2004 - A Wildlife Management Institute Book. A key element commonly put forward to the decline in antelope numbers is predation by coyotes, mountain lions, bob cats and golden eagles. The necessity of hiding cover was also established by the Game Department through the works of Woolsey and Neff. From the Woolsey and Neff studies on Anderson Mesa and its antelope herd they found there was inadequate hiding cover for fawns and thus there was a very high mortality of fawns by coyotes. Subsequent efforts in coyote control clearly showed major improvements in fawn to doe ratios during years of control and declines in years without control[...] There are other elements to pronghorn and grassland recovery that must be addressed in detail by the Coconino in this new forest plan. We did not find any details to how the Forest will implement and practically function management that will provide for the needs of antelope of hiding cover and high quality food resources and at the same time resolving the very real conflict of also providing forage for non-native species? For native grasses to grow to their full potential to obtain the desired height to provide the fawn hiding cover in the spring, they cannot be grazed in the summer. Proof of this is seen with the current conditions of the grasslands under current management. Even with an active monsoon there is no assurance the cool season grasses will re-grow to an adequate height. Again this point is proven with current conditions under current management. Even with livestock grazing curtailed or tightly managed, elk can also be a major problem. Early grazing by cows, this does not allow the grass seeds to set, which is not good for a number of reasons and counter to current management direction and as proposed in the new plan. Further at this same time there is a bloom of forbs which is vitally necessary for pregnant does and early fawns. It is well documented that forbs are the primary dietary item for antelope and deer, both species needed that high nutritional source to develop healthy fetuses, and to provide the necessary food source for lactating deer and antelope as well as the first few weeks of life for their fawns. Facts are that cows and elk like to eat forbs, the size of and consumption capability by cows create severe competition for that limited food source with antelope and deer. Cows directly compete against deer and antelope for forbs. Dietary Consumption by Plant Group Pounds per Day forb grass shrub antelope 2.4 0.98 0.36 1.06 deer 3 1.32 0.24 1.44 cows 26 4.68 15.6 5.72 The other major issue with grazing by non-native species and antelope is the direction provided by the Forest Service Handbook @ 2209.90. The AMP process does look to the Forest Plan for guidance, however it also looks at other laws and directives of the Agency. History has clearly shown the primary driver of the AMP process is the FSH 2209.13-2007-1. The latest copy we have of 2209.13 makes no mention at all to how a DFC's of any forest plan such as currently existing or being proposed would be integrated, nor is there clear language in the current or proposed Plans to resolve of conflicting management direction and/or details. ? Hopefully the final DFC's speak to providing hiding cover for fawns, grasses averaging 15 inches, while ? The FSH 2209.13-2007-1. speaks to allowable use, consumption of forage at "a conservative" amount of 31 - 40% utilization as measured at the end of the growing season, as demanded by MUSY through NEPA. Clearly the habitat needs of antelope are in direct conflict with the dietary needs of cows and elk

Response:

No particular understory height or composition has been identified in the Forest Plan. No particular grass height or grazing season has been set in the Forest Plan. These decisions will be made at the project level based on site-specific information. The Forest Plan will guide these site specific decisions with plan components that address grasslands, wildlife habitat, and livestock grazing management. For examples, see FW-TerrERU-Grass-DC-4 and 8, FW-WFP-DC-2 and 3, FW-Graz-DC-2, and FW-Graz-G-2. A management approach in the forestwide Grasslands section clarifies the site-specific nature of these types of decision. It reminds forest managers that: Species-specific wildlife needs are addressed on a site-specific basis and considered during project level planning and implementation. For example, where they occur, pronghorn typically benefit from grasses and shrubs greater than 11 inches in height to provide fawns protection from predators during the fawning season (AZGFD 2011). This habitat consideration is, however, dependent in large part on weather and site capability. Optimal fawning habitat conditions may not always be achievable due to variable environmental conditions (e.g. winter snow

fall and spring precipitation). Project specialists work together to determine achievable conditions that would optimize wildlife habitat at the site level, and give consideration to follow up monitoring that could assess how well such conditions have been met. Another management approach in Wildlife, Fish, and Plants reminds managers to consider current literature and best available science when making site specific decisions. It reads: Use current literature and the best available science when making site specific decisions relevant to project planning. This is done in an interdisciplinary context with input from other resource specialists. For example; the guideline specifying disturbance buffers around raptor nests (FW-WFP-G-11) is intended as a minimum buffer. Some raptor species (e.g., osprey) are more adapted to disturbance and are likely to tolerate a buffer of just 300 yards during the breeding season while other, less tolerant species (e.g. peregrine falcons (*Falco peregrinus*)) may require buffers of up to a ½ mile. Wildlife biologists work with other resource specialists to identify and define the appropriate site specific buffers (within the context of plan guidance) for other raptors on a case-by-case basis.

Commenter: Erman, Rick

Comment:

Make any new construction fence and/or modification of existing fencing a mandatory requirement for the bottom wire to be smooth,...] Fences are a major issue for antelope movement. Two items here, ? First, the reader has no idea at all how many miles of fence are in current and historic antelope habitat that need to be modified. Please provide the public some factual or lacking that an estimate to the magnitude of the issue. ? We were unable to find any reference to the fence standards which will be implemented by the Forest for fence construction or modification, other than the bottom wire is to be smooth and installed at 18 inches from the ground. From the AGFD Statewide Pronghorn Plan, April 2006 " Pronghorn traverse fences by passing under, rather than over, the fence. Woven wire or fences with bottom wires below 20 inches impeded to their movement. Keep a smooth bottom wire greater than or equal to 20 inches above the ground." Given the importance of antelope movement and the fact that fences are an impediment to easy movement of antelope, the Forest must provide the specifications / standards for fence modification and / or replacement Its hard to understand why the Forest will on one hand move all responsibility for wildlife to the Game and Fish Department when there are at least two Supreme Court decisions which clearly put the responsibility for wildlife on the FS, and when the Game Department says that bottom wire should be at 20 inches from the ground, all of a sudden the FS knows better and sets the standard at 18 inches.[...]and o at least 20 inches above the ground.

Response:

The guideline related to construction for wildlife friendly fences has been retained with slight editorial adjustments to improve its clarity. See FW-WFP-G-6. Another guideline has been added to the Wildlife, Fish, and Plants section that requires structural improvements to be planned and managed to provide wildlife with safe use of water and to allow safe passage. See FW-WFP-G-5. These guidelines would be applicable to any new decisions on fence construction and/or modification of existing fencing. In addition, a sentence has been added to a management approach in Wildlife, Fish, and Plants to remind managers to reference current agency recommendations for improving wildlife habitat. It reads: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing.

Commenter: Erman, Rick

Comment:

Make restoration of its grasslands to premium antelope habitat a top priority for antelope.

Response:

The Forest Plan has been modified in response to this comment. The current plan and the revised Forest Plan have similar plan components for antelope except in many cases, the direction has been expanded to forestwide in the revised Forest Plan. Both plans have pronghorn as a management indicator species for grassland. have guidelines to promote safe access to water and safe passage through fences. See FW-WFP-DC-5 and 6 and FW-ConstWat-DC-2. promote open structure in grasslands and an understory mix that provides food and cover for pronghorn except the direction in the revised Forest Plan applies forestwide instead of being limited to Management Area 27 in the current plan. See FW-TerrERU-Grass-DC-4 and 8. improve and expand pronghorn habitat except the revised Forest Plan has objectives for improving habitat forestwide instead one management area. See FW-TerrERU-Grass-O-1, 2, and 3. would design new road and new trail locations to meet species life history requirements, maintain access to adjoining habitat, maintain habitat for dispersal and migration. The revised Forest Plan direction is forestwide. See FW-WFP-G-6 and 13. Both plans would coordinate with Arizona Game and Fish Department on hunting recommendations except the management approach in the revised Forest Plan in the section on Wildlife, Fish, and Plants applies forestwide: Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity. The revised Forest Plan would promote antelope survival and successful reproduction through timing restrictions forestwide. It also has desired conditions for the Anderson Mesa Management Area that promote sustainable pronghorn populations that can move freely and easily access winter range. See FW-WFP-G-8; MA-AMesa-DC-1, 3.

Comment:

We were surprised not to see any detailed actions put forward in the plan in contrast to the DEIS description to the importance of that species within the grassland ecosystems. Further should be noted the current population / acres of active dog towns is minuscule compared to there historic range on the Forest. That combined with the fact that an Agency of the Federal Gov - the Biological Service was primary to the campaign to rid the west of all species of prairie dogs the first part of the 1900's. As prairie dogs are considered a Key Stone Species for grassland ecosystems we urge the Coconino make the reintroduction of Gunnison's Prairie Dogs a top priority in this new / second Forest Plan.

Response:

The Forest Plan does not make a decision about the reintroduction of Gunnison's prairie dog. Decisions regarding reintroduction of wildlife species are made by the Arizona Game and Fish Department and the U.S. Fish and Wildlife Service. The Forest Plan does, however, include direction that will be beneficial for prairie dog. Desired conditions in the Grassland Ecological Response Units section promotes open, connected, and properly functioning grasslands and recognizes prairie dog's role in influencing vegetation density and vegetation mosaic. See FW-TerrERU-Grass-DC-1, 2, 3, 8. Two grassland objectives would restore or enhance prairie dog habitat and a guideline would enhance vegetation and soil productivity in grasslands. See FW-TerrERU-Grass-O-2, 3, G-2. A desired condition in Wildlife, Fish and Plants maintains and improves habitat for native species and encourages measures to prevent or reduce the likelihood of disease (a major threat to prairie dogs). A management approach in the Grassland Ecological Response Units section emphasizes coordination with Arizona Game and Fish Department and the U.S. Fish and Wildlife Service particularly for grassland species, such as prairie dogs. It states: Coordinate with Arizona Game and Fish Department and U.S. Fish and Wildlife Service on objectives for wildlife conservation, education, habitat restoration, and improvements, particularly regarding pronghorn, prairie dogs, and black-footed ferrets. Management approaches in Wildlife, Fish, and Plants reminds managers to use current literature and the best available science when making site specific decisions relevant to project planning and to coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing.

Comment:

In support of the Draft Plan and DEIS, we are thankful the Forest included litter in the Desired Conditions, it is our hope in the final Plan a much stronger position is put forward as at least a Guideline if not a Standard to improve the amount of litter on the CNF As Soon As Possible. The need and function of Mulch / Litter cannot be under stated; to date we have yet to find one Natural Resource Professional or statement in a publication to the counter. It has been proven to be vitally important to a wide array of elements found in all of the Forests habitat types / ecosystems. Litter is Vital to the needed of; soils, erosion, hydrology, fire, wildlife, watersheds, plants both big and small. The FSH speaks to Litter at, 2509.18.2.05 - Litter. "Organic materials on the soil surface that are at least 1.25 cm (0.5 inches) thickness. This includes needles, leaves and all woody material." Another important document speaking to the importance of Mulch is Managing for Mulch, Molinar, Galt & Holechek; August 2001, Rangelands 23(4). On page 6, the authors recommend minimum residual herbage levels starting at 300 pounds per acre to 1,500 pounds per acre depending on the ecosystem. It must be noted that this paper speaks to studies in ecosystems not found on the Coronado and therefore are suggestions. However these same authors and same ecosystems were used by R 3 Range Staff in developing the amounts of forage that can be removed each year - 30 to 40% by herbivore from non-natives, even though they are NOT ecosystems found on the Coronado. It is very important to point out that the FS does not have any "set standards" - objective values that can be measured to categorize soils as capable or not capable based on the analysis of: soil erosion rates, bare soil or amount of litter current to natural. Rather the Agency uses a totally subjective approach with staff and/or line officers deciding if soils are satisfactory or unsatisfactory. Without specific criteria or thresholds or limits this is a totally arbitrary process resulting in arbitrary decisions. It is very disconcerting that the FS does not have any standards for litter, bare soil or erosion rates, given all the very important aspects to the ecosystems, their key elements AND the Long Term Sustainability of the lands of the CNF.

Response:

Litter, bare soil, and erosion rates are not specifically quantified because they naturally vary depending on landscape and site potential. Desired conditions in the soil section focus on soil function and overall productivity including the ability of the soil to resist erosion, reduced occurrences of compaction, and reduced instances of overland flow. See FW-Soil-DC-1, 2, and 3. Desired conditions recognize that localized accelerated soil erosion would naturally occur following high-severity fires but not to the extent of long-term impairment. See FW-Soil-DC-5. Forestwide soil guidelines provide limits to projects that would cause long term impacts to soil function and productivity including loss of vegetative ground cover (including litter) and erosion. See FW-Soil-G-2. Soil guidelines would also minimize or avoid soil impacts on steep slopes, on soils with moderate or severe erosion hazard, or on soils that are sensitive to degradation when disturbed. See FW-Soil-G-3. In addition, there are three Soil management approaches that indirectly relate to litter, bare soil, and erosion rates. These management approaches remind forest managers to: Implement projects that are beneficial for maintaining and improving soil condition and productivity and water quality and quantity. Use published terrestrial ecosystem survey information: (1) for broad resource and forestwide assessments and land management and project planning at regional, forest, and district levels; (2) as the basis for determining project goals and objectives, desired ecological conditions, and for predicting effects and impacts of the different management prescriptions and activities upon each terrestrial ecosystem; and (3) for the initial selection of areas for proposed projects. Conduct onsite soil investigations and refine mapping for soil disturbing projects that require site-specific, precise, highly detailed soil information, which is beyond the scale of the terrestrial ecosystem survey. Analyze or collect site-specific terrestrial ecosystem survey information as needed to accurately determine limitations, suitabilities, and productivity potentials of the different terrestrial ecosystems that occur.

Comment:

When the Agency is considering a timber treatment or Vegetation modifications the public is shown pages and pages of objective standards backed with volumes of ecosystem, site, and plant specific scientific studies. Vegetative treatment criteria include items like: ? Snags per acre, standing - both dead and future ? Down woody material > 12 inches in tons per acre ? Down woody material > 3 inches in tons per acre ? VSS classes, current various desired ? Size of stands ? Distance between stands ? % shading and canopy openings o within a stand o between stands o at a number of scales; ? 1K ? 10K blocks, and ? 100K blocks Absent, there are no standards put forward for litter, bare soil or erosion rates; either current or desired. Without site specific science to the ecosystems of the CNF to support non-native herbivore at production greater than 100# / acre and on slopes up-to 40%, AND with no requirements to the amount of litter be it dead standing or horizontal on the soil, Nor any standards to acceptable or unacceptable bare soil and erosion rates the only conclusion that can be drawn is the criteria to graze non-native species are arbitrary, put in place to maximize the amount of land area for use by commercial operations of grazing domestic livestock. Litter being composed of all native plants that are indigenous to a specific area, not just pine or juniper needles and limbs. The amount of litter be both vertical or horizontal is to provide for; ? Soil shading ? Top soil development ? Erosion control / elimination ? Moisture retention allowing for absorption into the soil & sub-straight / groundwater ? Food and shelter for small wildlife ? Hiding cover for fawns, antelope and deer ? Seed bedding ? Small plant production ? Fine fuel for fire Those map units / soil types via TES that do not meet the criteria of litter would be removed from consideration to be capable of supporting herbivore by non-native species. Early on in this process - initial Scoping there was a concept put forward by the Forest Service to developing a value / amount of forage and litter to be left on the land to provide for "ecosystem functions" sad to see that this concept was not carried forward. Much to Logical as well as that type of standard would impede the current status of the operation of the Forest. we ask the Forest to provide in the next document a standard in tons per acre specifically for unacceptable erosion rates. Those map units that do not meet these criteria would be removed from consideration to be capable of supporting herbivore by non-native species.

Response:

Litter, bare soil, and erosion rates are not specifically quantified because they naturally vary depending on landscape and site potential. Desired conditions in the soil section focus on soil function and overall productivity including the ability of the soil to resist erosion, reduced occurrences of compaction, and reduced instances of overland flow. See FW-Soil-DC-1, 2, and 3. Desired conditions recognize that localized accelerated soil erosion would naturally occur following high-severity fires but not to the extent of long-term impairment. See FW-Soil-DC-5. Forestwide soil guidelines provide limits to projects that would cause long term impacts to soil function and productivity including loss of vegetative ground cover (including litter) and erosion. See FW-Soil-G-2. Soil guidelines would also minimize or avoid soil impacts on steep slopes, on soils with moderate or severe erosion hazard, or on soils that are sensitive to degradation when disturbed. See FW-Soil-G-3. In addition, there are three Soil management approaches that indirectly relate to litter, bare soil, and erosion rates. These management approaches remind forest managers to: Implement projects that are beneficial for maintaining and improving soil condition and productivity and water quality and quantity. Use published terrestrial ecosystem survey information: (1) for broad resource and forestwide assessments and land management and project planning at regional, forest, and district levels; (2) as the basis for determining project goals and objectives, desired ecological conditions, and for predicting effects and impacts of the different management prescriptions and activities upon each terrestrial ecosystem; and (3) for the initial selection of areas for proposed projects. Conduct onsite soil investigations and refine mapping for soil disturbing projects that require site-specific, precise, highly detailed soil information, which is beyond the scale of the terrestrial ecosystem survey. Analyze or collect site-specific terrestrial ecosystem survey information as needed to accurately determine limitations, suitabilities, and productivity potentials of the different terrestrial ecosystems that occur.

Commenter: Erman, Rick

Comment:

Aspen The DEIS tells; ? Table 9 page 102 Trend by Alternative to PNVT we see over the term of 10 to 50 years; o Alt A - away o Alt B-C-D slowly toward ? Page 133, 134 & 135 "Aspen is distributed thought this Mixed Conifer Aspen populations are declining because of fire exclusions but also due to insect defoliators, drought and heavy ungulate browsing." ? Page 136 "Extensive mortality of the established aspen component combined with an almost complete regeneration failure at lower elevations (less than 8,500 feet), indicates that future persistence of aspen on the Coconino National Forest is not assured, except in relict locations at lower elevations. " ? No specific acres noted, defined in the Mixed Conifer with Aspen. ? Also not found is any estimate / reference to the historical acres of this species. The Plan tells; ? Page 33, 1,000 acres to be treated in 10 years. The primary question today is, Why is this an issue today, when the plight of aspen was brought forward by the RO in two documents: ? Sustaining Our Aspen Heritage Into the Twenty-first Century" a paper produced and published by the Rocky Mountain Forest and Range Experimental Station - August 1994, and ? Changes in Southwestern Forests: Stewardship Implications - Marlin Johnson April 1995. Must also note that Marlin Johnson provide information and discussion in the development of the first / current plan to the shocking decline in aspen. Given the importance of the topic for both the Region and Experimental Station to publish papers on the topic, a reasonable person would have assumed the Steward of the Public Lands charged in 1976 with the signing of the National Forest Management Act, charging the Forest Service to manage for long-term sustainability it would have fully addressed this issue setting in place corrective management, rather today we find out the issue has been set aside for all these years. The importance of this species / tree to its associated plant and wildlife communities is well known. The new DEIS and proposed Plan speak to the reasons for the decline; drought, tree encroachment, lack of fire, wildfire and heavy browsing. It is interesting to note that not once did we find any reference to cows &/or elk eating aspen - how can that be possible ? The mention of with out a total commitment to treat a measly 1,000 acres is totally unacceptable and must be expanded and accelerated![...]more details to the critical timeline for this plant ? specificity to the DFC's which set goals to the number of acres of aspen which will be protected and regenerated. The protection and regeneration must be defined either annually or in increments of 5 year periods

Response:

No change has been made in response to this comment. The objectives in the Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, the objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives.

Commenter: Erman, Rick

Comment:

At least 50% of the springs/seeps will be protected in the next 10 years, that protection will be incremental year to year with a minimum 10 springs per year.

Response:

The Forest Plan includes an objective to restore riparian function on at least 25 springs that are not in proper functioning condition during each 10 year period during the life of the Forest Plan. See FW-Rip-Sprg-O-1. This objective, like the other objectives in the Forest Plan, was established based on recent trends, current and anticipated staffing, and anticipated budgets and it was balanced against other management needs on the Forest. Objectives can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. The Plan's monitoring strategy establishes monitoring of improvements or restoration to springs.

Commenter: Erman, Rick

Comment:

At least 50% of the seasonal wetland acres will be protected in the next 5 years, that protection will be incremental year to year with a minimum of at least 75% of the total wetlands in 10 years.

Response:

The Forest Plan includes an objective to restore 5 to 10 wetlands that are not in proper functioning condition during each 10 year period over the life of the plan. See FW-Rip-Wtlands-O-1. This objective, like the other objectives in the Forest Plan, was established based on recent trends, current and anticipated staffing, and anticipated budgets and it was balanced against other management needs on the Forest. Objectives can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. The Forest Plan's monitoring strategy establishes monitoring of improvements or restoration to springs. Furthermore, the Plan provides strategic direction through its components in the All Riparian and Wetlands sections to protect all wetlands. Decisions made under the Forest Plan will need to be consistent with these components.

Comment:

The negative impacts of management activities on springs, streams and wetlands must be eliminated completely or minimized.

Response:

The forest plan addresses impacts to springs, wetlands, and streams in a number of places. There are specific desired conditions in the section for Wetlands that promote functional soil and water resources, diverse habitats for native species, maintenance of riparian soil moisture characteristics; a variety of age classes, and a native species composition that reflects the individual wetland types, such as seasonal wetlands. See FW-Rip-WtInds-DC-1, 2. Also, the section on Springs describes specific desired conditions for vegetation, soil, and riparian function. See FW-Rip-Spr-DC-1, 2, 3. There is a guideline that requires activities be designed and implemented to maintain or improve soil and riparian function, maintain or improve native vegetation and design features could include livestock management. See FW-Rip-Spr-G-3. Streams would be protected through guidelines that require projects and management activities to be designed and implemented to retain or restore natural streambank stability, native vegetation, and riparian and soil function. See Fw-Rip-Strm-G-2. Aquatic management zones would be required to protect or reduce the impact of activities to non-riparian intermittent streamcourses and to riparian areas. See FW-Rip-All-G-3 and FW-Rip-Strm-G-2. The Roads and Facilities section and the Watersheds and Water section have guidelines to apply soil and water best management practices to protect water quality. See FW-RdsFac-G-5; FW-Water-G-4. In addition, there are objectives to restore 5-10 wetlands currently not in proper functioning condition so that they are in, or are trending toward, proper functioning condition during each 10 year period over the life of the plan; an objective to restore riparian function to at least 25 springs identified as not in proper functioning conditions during each 10 year period during the life of the plan; and an objective to restore or enhance at least 70 miles of stream habitat during each 10-year period. See FW-Rip-WtInds-O-1, FW-Rip-Spr-O-1, and FW-WFP-O-4. Finally, there is a guideline in the section of Wildlife, Fish and Plants that requires management activities to be designed and implemented to protect and provide for narrowly endemic species and species with restricted distributions (many of which occur in springs). See FW-WFP-G-10. The forest plan does not explicitly exclude springs, which includes seeps, and seasonal wetlands, from non-native herbivory however no grazing is an option based on site specific analysis. Livestock use of springs and wetlands is also influenced by existing water rights. Chapter 4 of the plan, Grazing Suitability, shows that there are 82,322 acres that are closed to grazing as a result of signed decisions. Some of these areas include springs and wetlands. Permitted livestock grazing is intended to be consistent with the desired conditions of other resources, however the forest plan acknowledges that there may be lower levels of vegetation and higher levels of soil compaction immediately adjacent to earthen stock ponds and developed springs where livestock concentrate. See FW-Graz-DC-2, G-2. The Livestock Grazing section has specific guidance to protect springs, seasonal wetlands, and other riparian areas such as locating and using structural range improvements and salt, minerals, and/or other supplements in a manner that is consistent with desired conditions for other resources and so that riparian areas and wet meadows are protected. FW-Graz-G-4, 5. See also FW-Rip-All-G-1. There is a specific guideline in Livestock Grazing for when permitted livestock have access to riparian areas, the use on riparian species should provide for maintenance of those species, allow for regeneration of new individuals, protect bank and soil stability, and reduce the effects of flooding. Maintenance of woody riparian species should lead to diverse age classes of woody riparian species where potential for native woody vegetation exists. This guideline would not apply to fine scale activities and facilities such as intermittent livestock crossing locations, water gaps, or other infrastructure used to minimize impacts to riparian areas at a larger scale. See FW-Graz-G-7.

Commenter: Erman, Rick

Comment:

Unfortunately the current Forest Plan EIS does not provide any detail to the condition of soils as there is today in Table 8 where a comparison could be made to the conditions/acres/percents then to now. That would have provided a metric to how well the current forest plan and FS personnel functioned the plan. Truly an Opportunity lost. Review of the data shows a very disturbing fact, after 110 years of administration by the Forest Service there are still some 494,023 that are considered Impaired or Un-Satisfactory condition.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Erman, Rick

Comment:

Diversions of water sources that recharge wetlands MUST be assessed within 5 years and appropriate actions will be taken to eliminate their effects.

Response:

Diversions on wetlands are subject to water rights and generally associated with pipelines, dams, spring development, or earthen stock ponds. With water rights in mind, desired conditions in the forest plan would promote functional soil and water resources on most wetland acres, consistent with their flood regime and flood potential. See FW-Rip-WtInd-DC-1. Desired conditions for springs: Consistent with existing water rights and claims, springs are rarely developed and altered by human-made structures such as head boxes, cisterns, and pipelines and water rights should be maintained or procured where no water rights exist. See FW-Rip-Spr-DC-4, FW-Rip-Spr-G-2. Desired conditions for water in general: Water quality, water quantity and the timing of water flows support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities. Water quality, water quantity, and the timing of flows are sustained at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. See FW-Water-DC-6. Also Water guidelines promote best management practices to maintain water quality, quantity, and timing of flows, and to prevent or reduce accelerated erosion. See FW-Water-G-4. Finally, an objective in the section on Wetlands would restore 5 to 10 wetlands currently not in proper functioning condition (PFC) so that they are in, or are trending toward, proper functioning condition during each 10 year period over the life of the plan. See FW-Rip-WtInds-O-1.

Commenter: Erman, Rick

Comment:

Retirement of Grazing Allotments The new plan should expressly authorize the voluntary, permanent retirement of grazing allotments by permittees for conservation purposes, including endangered species recovery.

Response:

This is outside the scope of the Forest Plan. Management and administration of grazing permits is already addressed by existing regulation and policy. The authority to permanently retire an allotment from grazing is retained by the Forest Service and is not held by the permittee.

Commenter: Erman, Rick

Comment:

Herbivore by non-native species at both springs/seeps and seasonal wetlands will be eliminated in 5 years.

Response:

The Forest Plan does not explicitly exclude springs, which includes seeps, and seasonal wetlands, from non-native herbivory, however no grazing is an option based on site specific analysis. Use of springs and wetlands is also influenced by existing water rights. Chapter 4 of the plan, Grazing Suitability, shows that there are 82,322 acres that are closed to grazing as a result of signed decisions. Some of these areas include springs and wetlands. Permitted livestock grazing is intended to be consistent with the desired conditions of other resources, however the Forest Plan acknowledges that there may be lower levels of vegetation and higher levels of soil compaction immediately adjacent to earthen stock ponds and developed springs where livestock concentrate. See FW-Graz-DC-2, G-2. There are specific desired conditions in the section for Wetlands that promote functional soil and water resources, diverse habitats for native species, maintenance of riparian soil moisture characteristics, a variety of age classes, and a native species composition that reflects the individual wetland types, such as seasonal wetlands. See FW-Rip-WtInds-DC-1 and 2. Also, the section on Springs describes specific desired conditions for vegetation, soil, and riparian function. See FW-Rip-Spr-DC-1, 2, 3. There is a guideline that requires activities be designed and implemented to maintain or improve soil and riparian function, maintain or improve native vegetation and design features could include livestock management. See FW-Rip-Spr-G-3. In addition, there are objectives to restore 5-10 wetlands currently not in proper functioning condition so that they are in, or are trending toward, proper functioning condition during each 10 year period over the life of the plan and an objective to restore riparian function to at least 25 springs identified as not in proper functioning conditions during each 10 year period during the life of the plan. See FW-Rip-WtInds-O-1 and FW-Rip-Spr-O-1. Finally, there is a guideline in the section of Wildlife, Fish and Plants that requires management activities to be designed and implemented to protect and provide for narrowly endemic species and species with restricted distributions (many of which occur in springs). See FW-WFP-G-10. The Livestock Grazing section has specific guidance to protect springs, seasonal wetlands, and other riparian areas such as locating and using structural range improvements and salt, minerals, and/or other supplements in a manner that is consistent with desired conditions for other resources and so that riparian areas and wet meadows are protected. See FW-Graz-G-4 and 5. See also FW-Rip-All-G-1. There is a specific guideline in Livestock Grazing for when permitted livestock have access to riparian areas, the use on riparian species should provide for maintenance of those species, allow for regeneration of new individuals, protect bank and soil stability, and reduce the effects of flooding. Maintenance of woody riparian species should lead to diverse age classes of woody riparian species where potential for native woody vegetation exists. This guideline would not apply to fine scale activities and facilities such as intermittent livestock crossing locations, water gaps, or other infrastructure used to minimize impacts to riparian areas at a larger scale. See FW-Graz-G-7.

Commenter: Erman, Rick

Comment:

It should be noted that a large portion of the north western portion of Anderson Mesa is now designated as an Important Bird Area by Audubon due to the Seasonal Wetlands found there, as such a robust, diverse small plant community is vital.

Response:

The Forest Plan has been adjusted in response to this comment. The General Description and Background section for the Anderson Mesa Management Area acknowledges that this management area contains the Anderson Mesa Important Bird and Biodiversity Area.

Commenter: Erman, Rick

Comment:

Restore the small plant community back to its pre-settlement condition with wide distribution, abundance and diversity of species to improve soil and watershed conditions, they would find a way to make it happen

Response:

The Forest Plan represents one part of the Coconino NF's effort to improve vegetation, soil, and watershed conditions on the Forest. The Forest Plan provides a framework that will guide decisions on projects and activities on the Forest. Projects and activities that are implemented and authorized under the Forest Plan will need to demonstrate consistency and compliance with the components of the Forest Plan. Designing projects and activities to be consistent with the desired conditions in the Forest Plan will ensure that management decisions under the plan will maintain or improve the vegetation, soil, and watershed conditions on the Forest. References to promoting and restoring the small plant community, and the understory, are located in numerous locations in the plan. Some examples include FW-TerrERU-Grass-DC-1, 2, 4, G-2; FW-TerrERU-PJ-DC-4; FW-TerrERU-AspMpl-DC-1; FW-TerrERU-PP-DC-10; FW-TerrERU-MC-MCFF-DC-4; and FW-TerrERU-Grass-O-1, 2, and 3.

Comment:

As we have worked through this Forest Planning process we have noted from various DEIS's and other supporting documentation the following very important statements; "Maintaining satisfactory soil condition is important in maintaining long-term soil productivity; which is fundamental to sustaining ecosystem diversity. Unsatisfactory and impaired soil conditions result in reduced ability of the soil to grow plants and sustain productive, diverse vegetation and to provide favorable conditions for ecosystem diversity." Vegetative ground cover is essential to maintain and improve soil organic matter levels, water infiltration rates, productivity of all soils. Surface vegetative ground cover biodegrades into organic matter which is an important process of soil nutrient cycling and improves water infiltration into the soil. Groundcover increases the resistance to water flow which decelerates runoff, and reduces soil erosion due to overland flow and raindrop impacts." Looking at the graphic, some of the details found to key habitat types and acres still determined to be in Unsatisfactory / Impaired soil condition. ? Total Riparian areas; 28% = 2,869 acres ? Total Grassland areas; 88% = 182,195 acres ? Total P-J areas; 45% = 268,820 acres are ? Wetland Cienega; 96% = 2988 acres It is very hard to understand that today after 100 years of CNF ownership / management that these four major, important habitat groups have so many acres in Unsatisfactory / Impaired soil condition, Especially with all the attention given to these habitat types over the past 40 / 50 years. With the CNF having 1,827,435 acres and of that 1,320,096 have been determined as capable of supporting herbivore by non-native cows, that leaves 507,339 acres as not capable. It is impossible for use to determine from the information presented in the DEIS or D-Plan what are the soil conditions for these 507,339 acres. We ask the Coconino NF please provide in the next version of this Forest Plan and EIS documents; ? a specific time table where the soil conditions of the 4 PNVT's listed above will be treated to or management will be modified to accelerate their soil condition to Satisfactory

Response:

The Forest Plan emphasizes improvement of soil conditions in several ways. Soil function and productivity is addressed in the desired conditions. See FW-Soil-DC-1 through 5. Guidelines in the plan direction for other resources and program areas ensure that these desired conditions are considered by those other resources and program areas. For example, a guideline in the Livestock Grazing section requires grazing to be managed to maintain or move towards DCs for other resources. See FW-Graz-G-2. An objective in the Soils section seeks to maintain or improve soil conditions on 100,000 to 350,000 acres during the 10 years following plan approval. See FW-Soil-O-1. Guidelines in the Soils section require projects to be designed to avoid disturbance that would cause long-term impacts to soil productivity and function. See FW-Soil-G-2 and 3. A guideline in the Watersheds and Water section promote watersheds having enough vegetative ground cover to maintain long term soil productivity. These plan components ensure that maintenance and improvement of soil conditions are given strong consideration on all activities on the Forest.

Commenter: Erman, Rick

Comment:

a specific delineation to the soil condition classification to the 507,339 acres determined not capable of support herbivore by non-native species. ?
Assurance by the Forest that herbivore by non-native species is not allowed on those soil types determined to be; o Unstable o Unsatisfactory o Impaired

Response:

As part of the forest plan revision effort, the Forest was modeled to determine its capability to provide forage for domestic livestock grazing at the Forest level. The methodology for the capability modeling is discussed in the Livestock Grazing section of Appendix C in the environmental impact statement. Modeling efforts to identify capable grazing lands are not an attempt to define land that is capable of being grazed under all possible management intensities, prescriptions, management scenarios, etc. Nor, is it an attempt to define areas that should never be exposed to the presence of livestock. Capability modeling provides a reasonable, conservative assurance that the areas of land depicted as capable are capable of being grazed. Capability modeling does not define nor depict decisions that lands not displayed as capable are incapable of being grazed or should not be managed for livestock grazing. The models were used to estimate the amount of national forest rangelands that would provide a forage base for supporting livestock grazing under typical management scenarios and conservative grazing management practices. Not identifying an area as capable for livestock grazing within a grazing allotment does not mean that incidental livestock use will not occur in that area. For example, areas where the existing tree canopy reduces forage production to less than 100 lbs/acre would be identified as not capable. However, this classification does not mean livestock could not or should not pass through the area or graze some of the forage in the area. It just means the area was not deemed to have enough forage production to be used as a base for determining grazing capacity for the allotment. The same logic applies to lands that have soil types that limit forage production, such as the soils classified as "inherently unstable" in the Terrestrial Ecosystem Survey data that was used for the capability modeling for the Forest Plan Revision effort. For these reasons, the soil condition classification of lands modeled as not capable is unrelated to the determination that the lands are not capable of supporting livestock grazing. Soil condition is a factor that is considered at the project level, where decisions on whether to authorize grazing in a particular area and how to manage that grazing are made.

Commenter: Fillion, Jacob

Comment:

I also feel that the Forest Plan should explain how the Forest Service will enforce road closures and penalize illegal trail builders to protect resources and other forest users.

Response:

No change to the plan has been made in response to this comment. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect.

Comment:

I feel that the Forest Service should elevate all 13 areas eligible for wilderness designation to Recommended Wilderness Areas (RWA), as suggested in Alternative C of the Draft Plan.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Flaccus, Kathy

Comment:

The DEIS states on pp 100 that “Most areas where crusts have been observed show damage to biological soil crusts and currently cover less than 5 percent of the soil surface. Biological soil crusts are most prevalent in coarse-textured soils especially in Piñon-Juniper and Semidesert Grassland (Steinke, R., personal observations, 1989-2011).” However, according to FW-Soil-DC in the Draft Plan “Biological soil crusts are present with limited soil disturbance (<1/3 of area impacted) and functioning on coarse textured and sandy soils.” Which is correct, “most areas” show damage, or “limited soil disturbance” ? Since biological soil crusts are critical in soil productivity and stability, but they are poorly adapted to compressional disturbance. Therefore, areas with these soils should have the highest protection possible, with largest possible area in wilderness. I am concerned the plan allows 30% disturbance on the soil crusts, and ask what research demonstrates this is compatible with FW-Soil-Obj.

Response:

The desired condition that addresses biological soil crusts has been adjusted in response to comments. See FW-Soils-DC-4. The reference to a third of the area impacted was removed because it was confusing and not supported by scientific literature. The desired condition now contains an expression of what biological soil crusts should do, not levels of disturbance. Potential impacts to soil resources, including biological soil crusts, will be considered at the project level based on the soil resources that are present in the project area and the activities that are being considered.

Commenter: Flaccus, Kathy

Comment:

The DEIS states on page 100: .” Compared to alternatives B and D, implementing direction in alternative C plan direction would probably result in similar improvement in soil condition and productivity. Few roads and motorized trails are present under current conditions and so the improvement to soil would be small.” Perhaps soil improvement would be small, but prevention of future damage would be prevented. The DEIS statement ignores the fact that it has been very difficult to monitor and enforce off-highway vehicle use. I have seen many places where OHV traffic has gone completely off road, destroying soil cover and structure. Designated wilderness and semiprimitive nonmotorized will provide the most protection for soils, which promotes FW-Soil-G.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Flaccus, Kathy

Comment:

Understanding that drought, increased fire, catastrophic storms, and vegetation changes will all contribute to soil erosion, it is critical that the plan allow for the most protection of intact ecosystems. The DEIS states : “Promote interconnectedness of continuous blocks of habitat to allow for adaptation, including genetic and behavioral interactions; and Maintain the abundance and distribution of habitats to support recovery or stabilization of federally listed and other species.” (Pp 567). These goals are best met with the maximum area in wilderness and primitive nonmotorized designation, Alternative C.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term “Wildlife Habitat” was removed from the names of the Hospital Ridge, Jack’s Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Flaccus, Kathy

Comment:

I applaud the objective stated in FW-Soil-Obj: “ Maintain satisfactory soil conditions and improve impaired and unsatisfactory soil conditions on 100,000 to 350,000 acres during the 10 years following plan approval7. “ I believe that alternative C is the best alternative to achieve this goal because it prioritizes activities that cause the least ground disturbance as stipulated in FW-Soil-G.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term “Wildlife Habitat” was removed from the names of the Hospital Ridge, Jack’s Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Folke, Daniel

Comment:

addition, the link between forest health and water supply should be made more explicitly, especially concerning the Upper Lake Mary and the well fields in the Lake Mary and Woody Mountain area. This should be clearer under the All Vegetation Types section and in WtrShd-G-1.

Response:

A desired condition in the Watersheds and Water section has been adjusted to incorporate this suggestion. See FW-Water-DC-3. After reviewing the Watersheds and Water guideline, it was determined that it would be more appropriate to change it to a management approach. "Water supply" was added to the examples of community infrastructure listed in the management approach. The management approach states: To enhance the protection of human health and safety, consider watershed treatments such as vegetation thinning, prescribed burning, and channel stabilization where protection of people, structures, and community infrastructure (e.g., roads, bridges, power corridors, and water supply) in and associated with the wildland-urban interface (WUI) are at risk. "Water supply" is also included in the Wildland Urban Interface section as one of the categories in which reduced fire hazard, intensity, and severity would be promoted. See FW-WUI-DC-2.

Commenter: Folke, Daniel

Comment:

The City recently acquired 4 parcels of State land on Observatory Mesa near A-1 Mountain that are being managed as a natural area. As required by the Arizona State Parks conservation easement, these parcels are restricted to non-motorized recreation opportunities; however, there is a Forest Service road that is open across these parcels. The plan already includes language about reducing motorized vehicle encroachment on National Park Service lands at Sunset Crater. Staff suggests similar language should apply to reducing motorized vehicle encroachment on surrounding non-motorized areas along USPS roads in the Observatory Mesa Natural Area.

Response:

The Forest Plan contains guidance that addresses the motor vehicle encroachment. This guidance would be applied by any project-level decisions addressing motorized access near the Observatory Mesa Natural Area. It is a desired condition for motorized vehicle use to occur as identified on the motor vehicle use map. See FW-Rec-Disp-DC-2. Standards prohibit motor vehicle use beyond the designated system of roads, trails, and areas as defined on motor vehicle use maps. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1. Guidelines require roads to be clearly marked to facilitate navigation of designated motorized routes and to prevent motorized use outside of designated areas and routes. See FW-RdsFac-G-3 and FW-Rec-Disp-G-1. Finally, a management approach has been added to the Dispersed Recreation section to remind forest managers to coordinate on motorized recreation management to reduce cross-boundary conflicts. It states: Coordinate with city, county, state, and other agencies to manage motorized recreation and reduce cross-boundary conflicts. A reference to the Observatory Mesa Natural Area has been added to the General Description and Background for the Flagstaff Neighborwood Management Area.

Commenter: Folke, Daniel

Comment:

could also be further information post-fire restoration of critical water supply facilities similar to what occurred after the Schultz fire with the city pipeline.

Response:

Direction for post-fire restoration is covered under Forest Service Manual and Handbook direction for Watershed Protection and Management. See Forest Service Manual 2500 Watershed and Air Management Chapter 2520 Watershed Protection and Management and Forest Service Handbook 2509.13 Burned Area Emergency Response (BAER) Handbook. Post-fire evaluation and recommendations are done on a fire specific basis and not addressed in the Forest Plan. During BAER analysis, critical values, resources, and threats are identified. Values (life, safety, property, etc.) and resources (natural or cultural) are described in terms of the nature and magnitude of the threat. Water supply facilities could be identified as values at risk and emergency treatments could be proposed to alleviate the risk.

Commenter: Folke, Daniel

Comment:

If the Forest Service considers an area larger than the Walnut Canyon Management Area in the proposed plan as part of the range of alternatives, the guideline limiting land exchanges and standard prohibiting road and utility construction should have an exception meeting needs of the adjacent communities and the public such as land for a water treatment plant or construction of a municipal utility.

Response:

No change has been made in response to these comments. The boundary of the Walnut Canyon Study Area would be difficult to find on the ground, which would make implementation difficult. The Walnut Canyon Management Area boundary was developed with topographical features and landmarks in mind to make the boundary more locatable on the ground. The Walnut Canyon Study has been completed and transmitted to the Secretary of Agriculture. The study presents 3 options to the Secretary, one of which is consideration of the area for special designation. The Secretary currently has the study under consideration and the Forest is waiting for a recommendation on how to proceed.

Commenter: Folke, Daniel

Comment:

Also, we feel it is important to list Upper Lake Mary along with Woody Mountain Well Field and Lake Mary Well Field in this paragraph and the same paragraph on page 19.

Response:

References to these areas have been incorporated into the General Description and Background sections of the relevant management areas. Upper Lake Mary and the Lake Mary Well Field are recognized as sources of water for the City of Flagstaff in the General Description and Background section of the Lake Mary Watersheds Management Area. The Woody Mountain Well Field is recognized as a source of water for the City of Flagstaff in the General Description and Background section of the Pine Belt Management Area.

Commenter: Folke, Daniel

Comment:

The definition of WUI in the glossary includes 1nunicipal watersheds. Would municipal water supplies also be appropriate to include if there is a distinction between these terms?

Response:

The definition of wildland-urban interface (WUI) has been adjusted based on your suggestion. The term "municipal watersheds" has been replaced with "critical sites for water supply" to expand the areas covered by the term, wildland-urban interface.

Commenter: Folke, Daniel

Comment:

The second paragraph under Watersheds General Background on page 18 is also confusing. It is not clear what the difference is between a designated municipal watershed and a municipal water supply. These concepts could be better explained either in this section or in the glossary.

Response:

The General Description and Background section for the Watersheds and Water section has been adjusted to address your concern. In recognition of the unique management concerns associated with the watersheds that serve the C.C. Crain Reservoir, Upper and Lower Lake Mary, and the Inner Basin, the Forest has identified these watersheds as separate management areas. See response to Concern #17 for additional information on these management areas. As adjusted, the General Description and Background section for the Watersheds and Water section recognizes that the watersheds within the C.C. Cragin Watersheds, Inner Basin Watershed, and Lake Mary Watersheds Management Areas contribute water to public water systems.

Comment:

A noticeable difference between the current plan and the proposed plan is the absence of the Inner Basin and Lake Mary Management Area, which had detailed information on management of these municipal watersheds. The proposed plan very generally embeds protection of water supply reservoirs on pages 20 and 26 and also protects the Inner Basin water supply from recreation impacts. Overall, staff is not concerned with this shift in organization; however, we would appreciate additional detail on municipal watersheds being added to several sections of the plan, including the general back ground for Water Quality, Water Quantity) and Aquatic Systems and in breaking out municipal watersheds in Appendix D.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrG-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrG-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Comment:

Pursuant to the above-listed facts we respectfully request the appropriate inclusion of the C.C. Cragin municipal watershed and related purposes within the revised Land Management Plan and supplemental environmental documentation. These should include Background Descriptions, Desired Conditions (Watersheds, Water Quality, Quantity, and Aquatic Systems, Reservoirs and Lakes, Upper Clear Creek, etc.), and Objectives.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrg-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrg-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Commenter: Galbraith, Debra

Comment:

Significant investment has been made by SRP and the Town of Payson to ensure the reservoir infrastructure, and management of such, will meet the needs of municipal and domestic water users in Payson and the Phoenix metropolitan area. The reservoir will be the primary drinking water source for Payson, and is anticipated to be the primary water source for many of the other communities located within Northern Gila County. It is imperative that the forest service manage and care for the C.C. Cragin watershed in a manner that protects human health and safety in relation to the reservoir water supply through watershed treatments, such as vegetation thinning or prescribed burns, to prevent catastrophic events such as wildfire that currently have a high probability of occurring.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrg-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrg-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Comment:

Within the draft update of the forest plan, there are many references to water supply, water quality and aquatic systems. Of particular importance to the Town of Payson (Payson) is the recognition of water supply and water quality as it relates to C.C. Cragin Reservoir as a municipal water supply for Payson and those served by the Salt River Project (SRP). Under provisions of the Arizona Water Settlement Act of 2004, the United States, acting through the Secretary of the Interior, accepted the transfer of title to C.C. Cragin Reservoir (referenced as Blue Ridge Reservoir at that time) for the exclusive use and benefit to the Salt River Federal Reclamation Project. Upon the transfer of title, SRP assumed care, operation and maintenance of the project pursuant to a 1917 agreement between the U.S. and SRP. In addition to the delivery of this water for use by municipal, agricultural and commercial users within the SRP water service territory, a portion of the reservoir storage was made available for municipal and domestic uses in Northern Gila County, in particular Payson and other Northern Gila County communities. A 2008 agreement between SRP and the Town of Payson and subsequent action by the Arizona Department of Water Resources resulted in a permanent surface water right of 3,000 acre-feet per year in C.C. Cragin Reservoir for Payson. Consequently, as part of the process in updating the Coconino forest plan, the watershed of the C.C. Cragin Reservoir should be designated as a municipal watershed.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrg-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrg-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Commenter: Gitlin, Alicyn

Comment:

We understand that leasing of lands for mineral extraction falls under the jurisdiction of BLM, however, the Coconino NF has the authority to designate forest areas as “no surface occupancy” or “no leasing,” or to impose other leasing stipulations. We recommend the adoption of stringent guidelines in the Forest Plan in order to limit future surface occupancy and leasing for mineral development, which will help to protect the social, cultural, and ecological values of forest areas. Considering that Forest Plan revisions take place once every 15 years, and that technological advances in mineral extraction can occur rapidly (e.g. hydro-fracturing of oil shale has developed in the past ten years, and is now occurring in many neighboring states), it is important that stringent mineral development guidelines are already in place to ensure long-term protection of natural resources within Coconino NF.

Response:

No change has been made in response to this comment. In addition to an array of desired conditions that would guide any future responses to leasing applications, the Plan includes a guideline that requires the consideration of No Surface Occupancy and other protections to protect a wide variety of resources. See FW-Minerals-G-3. FW-Minerals-G-1 and 2 also address mineral withdrawal.

Comment:

As discussed previously, riparian and wetland areas should also be classified as unsuitable for grazing except in instances where valid existing water rights require access to these areas.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled “Determination of Lands Capable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

In regard to energy and mineral development, we recommend alternative C, which sets aside 91,445 acres (to include existing withdrawals, new wilderness, and special areas) for withdrawal from mineral entry. This alternative offers native wildlife and plant species the best opportunity to survive and persist in the presence of changing climate and increasing wildfire risk. Alternative B creates guidelines for future mineral development projects, which are the same for alternative C. Specifically the “social, cultural, and ecological values of an area” are to be considered for withdrawal from mineral entry. However, alternative B recommends just 14,767 acres to be withdrawn under the Draft Forest Plan language.

Response:

The Forest Plan recommends three wilderness areas (Abineau, Davey's, and an extension to the existing Strawberry Crater Wilderness), the Cottonwood Basin Geological and Botanical Area, two new Research Natural Areas and a proposed expansion to an existing Research Natural Areas. Forest Service Manual 2760 directs that withdrawals should be considered for areas with a history of mineral findings and in which the management direction is not compatible with alienation or use under the mining laws; for example, research natural areas, interpretive or cultural sites, scenic areas, geologic areas, critical habitat of endangered species having a very limited range and specific habitat requirements not found elsewhere, and botanical areas. There are almost no areas on the forest with 'a history of mineral findings' and there is low mineral potential on the forest. The only active mine is the Verde Gypsum Mine, most of which is on state and private lands. It is likely that the forest will continue the two existing mineral withdrawals (San Francisco Peaks Mountain Elden Recreation Area and Oak Creek Canyon Recreation Area). The Forest Service Manual also suggests considering alternatives to withdrawals to protect areas (see FSM 2761.4). The Forest Plan has three guidelines related to withdrawals. See FW-Minerals-G-1, 2, 3. These guidelines recommend areas to be consider for withdrawal for locatable minerals, recommend renewing existing withdrawals if withdrawal is the only way to protect the values, and identifies withdrawal areas to be considered for no surface occupancy, no leasing, or other leasing stipulations for leasable minerals. In addition, a management approach for Mineral Resources reminds managers to: Consider withdrawing congressionally designated areas from entry and operations for locatable minerals (or other approaches) if withdrawal was not a part of the establishing legislation for the designated area. Prioritize mineral withdrawals where mineralization poses the most risk.

Commenter: Gitlin, Alicyn

Comment:

We support the guideline of withdrawing the forest's research natural areas and botanical areas from mineral entry, in order to protect the numerous ecological values of these areas. We recommend withdrawal of the Cottonwood Basin Fumaroles Geological Area, which displays a unique geological phenomenon; and we agree with the Draft Forest Plan language regarding retention of existing withdrawals: "To protect social, cultural, and ecological values, the existing mineral withdrawal on the San Francisco/Mount Elden Recreation Area and Oak Creek Canyon Recreational Area should be maintained" (p. 84). Mineral development should remain prohibited in these recreation areas because of their significant social and ecological importance.

Response:

The guideline to consider withdrawing geological and botanical areas that are not in wilderness has been retained. See FW-Minerals-G-1. The guideline to maintain the existing mineral withdrawal for the San Francisco/Mount Elden Recreation Area and Oak Creek Canyon Recreational Area has been modified in several ways. First, the express mention of the San Francisco/Mount Elden Recreation Area and Oak Creek Canyon Recreational Area has been removed and the guideline has been edited to apply to all existing mineral withdrawals. Second, the intent has been clarified to indicate that renewal of existing mineral withdrawals should be pursued when that is the only way to protect identified social, cultural, and ecological surface resource values and current law and the locatable surface use regulations do not provide adequate protection. See FW-Minerals-G-4. This guideline is consistent with agency policy regarding withdrawals found in Forest Service Manual 2761.03 See Forest Service Manual 2761.4 for a listing of alternative protection opportunities that could be used instead of withdrawals to protect surface resources.

Commenter: Gitlin, Alicyn

Comment:

One way the Forest Service can achieve better management of land resources is by allowing current grazing permit holders to voluntarily retire their allotments for conservation purposes. This will build flexibility into Forest management and allow for improved habitat and protection of understory seed banks in an uncertain climatic future.

Response:

Allowing permittees to permanently retire their allotments is outside the scope of the plan. The authority to permanently retire an allotment from grazing is retained by the Forest Service and is not held by the permittee.

Comment:

Geothermal resource potential on Coconino NF has been identified in the San Francisco and Mormon Mountain Volcanic Fields, and the geothermal waters near Montezuma Castle National Monument and Verde Hot Springs. While there are many advantages to geothermal energy production, the extraction of this renewable resource needs to be limited to those areas where social, cultural, and ecological values will not be compromised, and where existing transmission corridors can be utilized. We would like to see specific guidelines in the Forest Plan for geothermal energy production that is minimally disruptive to ecosystem processes and does not infringe upon social and cultural values. As mentioned in the DEIS, chapter 3 (p. 643), the disturbances associated with geothermal mining include: "Removal of trees and surface vegetation, displacement of surface soils, erosion and sedimentation, construction of roads, buildings, wells, pumping stations, waste water ponds, and transmission lines." Such disturbances can be severe for native flora and fauna in the region and may facilitate the establishment of exotic species. Due to the potential for significant ecological disturbance, as well as the cultural significance of these areas for local tribes, geothermal energy production may not be suitable on Coconino National Forest. Guidelines need to be stipulated for each of the disturbances mentioned above in order to ensure minimal impacts for vegetation, wildlife, and cultural values before any mineral development project moves forward.

Response:

The Forest Plan contains several plan components that would manage potential disturbances from geothermal energy development to protect cultural and ecological resources. Geothermal resources are considered leasable minerals. The Mineral Resources section includes a guideline that requires no surface occupancy, no leasing, or other leasing stipulations for leasable minerals in numerous areas, including: Areas of very high scenic integrity not located in wilderness, designated and eligible wild and scenic rivers, or other withdrawals. San Francisco Peaks/Mount Elden Recreation Area withdrawal. Areas of very high archaeological site density (greater than 60 sites per square mile) and potentially eligible for the National Register of Historic Places. Areas with Federally threatened or endangered, or Forest Service sensitive species. Traditional cultural properties where historic preservation laws alone do not adequately protect the cultural resource. See FW-Minerals-G-3. Another guideline requires the protection of important wildlife and plant habitats, visually sensitive areas, archaeological sites, places of cultural importance to American Indians, and areas with large capital investments through the use of surface occupancy restrictions, mitigation measures, and operating plan requirements imposed on mineral activities. See FW-Minerals-G-4. A management approach in this section reminds forest managers to: Incorporate BMPs and stipulations into future leases as appropriate to the location from the "Final Programmatic Geothermal Leasing Programmatic Environmental Impact Statement for Geothermal Leasing in the Western U.S." (Bureau of Land Management, 2008) or more current direction. The desired conditions for cultural and ecological resources and management areas included in the Forest Plan will also guide any decisions on geothermal development.

Commenter: Gitlin, Alicyn

Comment:

We have specific concerns about the potential for geothermal resource development in the San Francisco Volcanic Field, due to the ecological impacts arising from well drilling, plant construction and operations, and construction of a new transmission corridor. The Verde Hot Springs should be withdrawn from consideration for similar reasons. There are sensitive plant and wildlife species in this area, and considerable habitat disruption would be required for energy transmission.

Response:

No change has been made in response to this comment. Per Forest Service policy, requests for withdrawal from mineral leasing should be made rarely. See FSM 2761.04. Existing public laws, Federal regulations, and leasing stipulations provide substantial opportunities (FSM 2822.2) to accommodate both surface resources and the recovery of leasable minerals. The Forest Plan is not silent on this topic. It includes a guideline in the Mineral Resources section that lists areas that should be considered for withdrawal for locatable minerals. See FW-Minerals-G-1. If it is consistent with this existing policy and guideline, the San Francisco Volcanic Field and the Verde Hot Springs could be considered for mineral withdrawal. That determination would be made at the project level based on site specific information. The Forest Plan contains plan components that would guide decisions on requests for geothermal development. For example, see FW-Eco-DC-1, FW-BioPhys-Geo-DC-1, FW-Water-DC-1, 2, and 3, and FW-FWP-DC-1, 2, and 3. Specific protections and design features would be identified at the project-level based on the activities that are proposed and the specific species that could be impacted.

Commenter: Gitlin, Alicyn

Comment:

The Coconino National Forest has stated and it is widely known the Coconino National Forest is negatively impacted by population growth and increasing demand on the forest. The Coconino National Forest is currently experiencing negative changes in forest use due to increasing safety issues from increasing users on roads and trails, increasing user conflicts due to conflicting and/or unsafe activities on roads and trails, and increasing illegal activities e.g. illegal downhill or “gravity” trail building and activity resulting in further conflicts and unsafe conditions. These illegal activities must be stopped by the USFS, and the Forest Service must enforce its existing regulations against any such activities. Illegal downhill (or “Gravity rider”) trails must be obliterated.

Response:

The Forest Plan provides the framework that would guide site-specific consideration of this activity. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. The Forest Plan also has guidance on user conflicts. See FW-Rec-All-G-2. Whether this activity is impacting desired conditions in a particular area and how to manage this activity is a site-specific decision. The identification of specific prohibitions on mechanized travel would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212). For these reasons, a standard has not been added in response to these comments. Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. The level of Forest Service law enforcement is dependent on staffing, which is reflective of the budget allocated to the Forest Service from Congress.

Commenter: Gitlin, Alicyn

Comment:

As it is written now, statements in the entire Forest Plan are vague and lacking in specific meaning and details. The Forest Service must change this Plan and add specific details, exact plans of action, metrics for desired future conditions, metrics for monitoring, metrics for enforcement of regulations, and metrics to measure how you plan to follow your statements to “promote responsible land management for the Coconino and fulfill the Forest Service’s responsibility for the stewardship of the forest to best meet the needs of the American people”.

Response:

The Forest Plan is, by design, strategic in nature. It focuses on desired conditions that are described in qualitative and quantitative terms. The Forest Plan sets forth objectives that are measurable, anticipated results that help achieve or move towards desired conditions over the life of the Forest Plan. The specific details on how projects will be designed and conducted will be established as projects are developed, taking site-specific information into account to ensure that the project maintains or moves the forest towards the desired conditions in the Forest Plan. Monitoring to determine the effectiveness of the Forest Plan is discussed in the Monitoring Strategy in Chapter 5 of the Forest Plan. The Monitoring Plan has been reviewed and adjusted to ensure that each monitoring question identifies the metrics that will be used to help answer the monitoring question.

Commenter: Gitlin, Alicyn

Comment:

Aspen stands are declining within the Coconino. Livestock effectively suppress aspen regeneration. (Sampson 1919, Houston 1954, Kay 2001, Beschta and Ripple 2010). To protect declining aspen stands, livestock, areas that contain aspen stands should be excluded from livestock grazing and classified as unsuitable for this activity.

Response:

Specific direction to exclude livestock grazing from aspen has not been added to the Forest Plan. Although the requested changes have not been made, the concern expressed regarding the potential impacts of livestock grazing on aspen is still addressed by other Forest Plan components. A guideline in the Forest Plan requires livestock grazing to be managed to meet, or move towards, the desired conditions for forest resources such as soil, water, vegetation, and species. Also, structural range improvements (fences, earthen stock ponds, etc.) should be located, constructed, reconstructed, maintained, and used in a manner consistent with desired conditions for sensitive resources, including aspen, and salt and/or other supplements should be used and located so sensitive resources are protected from grazing related impacts. See FW-Graz-G-2, 4, and 5. The Aspen and Maple section includes several desired conditions for aspen. See FW-TerrERU-AspMpl-DC-1, 2, and 3. These plan components will guide decisions on livestock grazing in aspen. Suitability is discussed in chapter 4 of the plan and appendix C of the FEIS. Aspen could be determined to be unsuitable through future site specific decisions but were not determined to be unsuitable in this process. For additional information on grazing suitability, see the response to comment suggesting that the Forest Service conduct a grazing capability and suitability analysis in compliance with the National Forest Management Act.

Comment:

Cedar Bench (5,867 acres). We agree with the Forest Service that the primitive setting, water quality of West Clear Creek and that native biodiversity would benefit; and that critical and unique habitats and diverse ecological conditions would be protect by Potential Wilderness designation. (Forest Service. 2013b:43).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Gitlin, Alicyn

Comment:

The Coconino National Forest states that your funding is flat or may even be decreased (also see Recreation Specialists Report). It is suggested that you keep your proposed actions within the revised Plan to a cost level that allows you to do your own trail work or pay an outside, objective vendor to do it. If you cannot afford it, then don't propose to build new trails and engage in unethical and/or perceived collusion with a special interest group.

Response:

No change has been made in response to this comment. An underlying implication of this comment is that the use of volunteers on a trails project indicates that the action is only beneficial to the volunteers and may be contrary to sound forest management. Trails projects, like all projects, must be designed to be consistent with the plan components in the Forest Plan and laws, regulations, and policies. Who provides the labor for implementing these projects, whether by Forest Service employees, contractors, volunteers, or a combination of these resources, should have no bearing on whether project is meeting its intended purpose and is consistent with the Forest Plan and laws, regulations, and policies. Relying upon, and making opportunities available for, volunteers is an important component of the Forest Plan as indicated by the numerous references to volunteers and volunteerism throughout the Forest Plan. Volunteer efforts support critical programs on the Forest and foster a sense of stewardship for the Forest.

Commenter: Gitlin, Alicyn

Comment:

The proposed forest plan (alternative B) does a sufficient job to propose new guidelines for mineral development within Coconino NF, [...] yet does not do enough to establish new wilderness and special areas for withdrawal.

Response:

The Forest Plan recommends three wilderness areas (Abineau, Davey's, and an extension to the existing Strawberry Crater Wilderness), the Cottonwood Basin Geological and Botanical Area, two new Research Natural Areas and a proposed expansion to an existing Research Natural Area. Forest Service Manual 2760 directs that withdrawals should be considered for areas with a history of mineral findings and in which the management direction is not compatible with alienation or use under the mining laws; for example, research natural areas, interpretive or cultural sites, scenic areas, geologic areas, critical habitat of endangered species having a very limited range and specific habitat requirements not found elsewhere, and botanical areas. There are almost no areas on the forest with 'a history of mineral findings' and there is low mineral potential on the forest. The only active mine is the Verde Gypsum Mine, most of which is on state and private lands. It is likely that the forest will continue the two existing mineral withdrawals (San Francisco Peaks Mountain Elden Recreation Area and Oak Creek Canyon Recreation Area). The Forest Service Manual also suggests considering alternatives to withdrawals to protect areas (see FSM 2761.4). The Forest Plan has three guidelines related to withdrawals. See FW-Minerals-G-1, 2, 3. These guidelines recommend areas to be considered for withdrawal for locatable minerals, recommend renewing existing withdrawals if withdrawal is the only way to protect the values, and identifies withdrawal areas to be considered for no surface occupancy, no leasing, or other leasing stipulations for leasable minerals. In addition, a management approach for Mineral Resources reminds managers to: Consider withdrawing congressionally designated areas from entry and operations for locatable minerals (or other approaches) if withdrawal was not a part of the establishing legislation for the designated area. Prioritize mineral withdrawals where mineralization poses the most risk.

Comment:

The Forest Service is required by NEPA to take a hard look at potentially significant impacts at direct, indirect and cumulative effects of the draft plan to grazing suitability. The methods used to determine suitability must be clearly described in a way that is understandable to the decision-maker and the general public.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled “Determination of Lands Capable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

Range capability in the Coconino National Forest has significantly changed since the mid- 1980s, when grazing suitability assumptions on which the Draft Plan is based were developed. Prior estimates of range capability did not account for synergistic effects of livestock grazing and climate change on soil, water, vegetation and fire regime. (Beschta et al. 2012). It is unlikely that range resources in the planning area ever will return to “historical norms” that supported forage production capacity over the past century: Despite ample uncertainties in model projections of hydroclimate change, and the continuation of natural climate variability on all timescales, it seems very probable that [South Western North America – “SWNA”] will be drier in the current century than in the one just past. Skillful prediction of the magnitude and timing of this drying will require prediction of the rate of anthropogenic change and prediction of the evolving natural variability for which currently there is scant evidence of any predictability beyond the interannual timescale. Another likely outcome is a continuing decline in winter snowpack and earlier onset of snow melt that will add to the stress on regional water resources. Seager and Vecchi (2010: 21282). Historically, “interglacial climates in the southwestern US can experience prolonged periods of aridity, lasting centuries to millennia, with profound effects on water availability and ecosystem composition. The risk of prolonged aridity is likely to be heightened by anthropogenic forcing.” (Fawcett et al. 2011: 520). Williams and others (2012) noted that while average winter precipitation totals in the Southwest have not been exceptionally low in the recent past, average summer-fall evaporative demand since 2000 is the highest in the past 1,000 years. Forest drought stress over much of the past 13 years, including in 2011 and 2012, matched or exceeded the recorded “megadroughts” of the 13th and 16th centuries. The only other 13-year periods when similar conditions occurred with such frequencies in the past 1,000 years were during the megadroughts themselves. The strongest megadrought occurred during the second half of the 1200s and is believed to have played an important role in the abandonment of ancient Puebloan cultural centers throughout the Southwest. The observed trends in drought stress on forest conditions coincide with strong climate model agreement on anthropogenic greenhouse warming. Model projections indicate that megadrought-level stresses on water availability and vegetation production will be regularly exceeded by the mid-21st century, and even the wettest and coolest years of the late-21st century will be more severe than the driest, warmest years of the past millennium. (Williams et al. 2012). The Forest Service does not account for this information, which has been repeatedly supplied to it through numerous public comments on allotment-specific management plans in the Coconino National Forest. Drought will continue to impact range capacity and utilization levels for the duration of the revised forest plan, (Fawcett et al. 2011, Seager et al. 2007, Seager and Vecchi 2010), and it is likely to transform resource availability by stressing water supplies and net productivity, which in turn will produce novel environments. (Williams et al. 2012). The Forest Service should disclose the foreseeable range of climate effects to range suitability, and candidly disclose past instances when livestock grazing has exceeded capability.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled “Determination of Lands Capable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock

grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

NFMA implementing regulations require the Forest Service to determine “the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species.” 36 C.F.R. § 219.20 (1982). “The present and potential supply of forage for livestock, wild and free-roaming horses and burros, and the capability of these lands to produce suitable food and cover for selected wildlife species shall be estimated.” Id. § 219.20(a). Where the agency identifies lands that are “in less than satisfactory condition,” it “shall” plan for their restoration. Id. The agency must consider, among other things, “possible conflict or beneficial interactions among livestock, wild and free roaming horses and burros and wild animal populations, and [...] direction for rehabilitation of ranges in unsatisfactory condition...” Id. § 219.20(b).

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled “Determination of Lands Capable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

In addition, the CNF should include the 6.7 miles section of the Upper Verde River in any analysis, interim protections and subsequent management direction provided by the revised Forest Plan. This segment of the Upper Verde River was under the purview of the Prescott National Forest in previous studies, but the eastern bank of the river is managed by the CNF. It is the responsibility of the CNF to preserve each river segments' Outstandingly Remarkable Values (ORVs) and free-flowing conditions under interim protections until a full suitability study is completed for each segment.

Response:

Several adjustments have been made to the Forest Plan in response to this comment. A table identifying the designated and eligible wild and scenic rivers on the Coconino National Forest has been added to the Designated and Eligible Wild and Scenic Rivers section of the Forest Plan. The table lists the 6.7 mile segment of the Upper Verde River as eligible for a recreational classification. See Table 8 in the Forest Plan. Information on each designated and eligible wild and scenic river has been added to the General Description and Background for the Designated and Eligible Wild and Scenic Rivers section. The information on the Upper Verde River segment explains that this segment is administered under Prescott NF Forest Plan direction. The eligibility report prepared by the Prescott National Forest on all of the Upper Verde River eligible river segments has been listed in the Forest Plan in the Designated and Eligible Wild and Scenic Rivers section in Appendix D, Other Sources of Information. In the event that administration of the eligible Upper Verde River segment returned to the Coconino National Forest, the Forest Plan has components address eligible rivers segments. See SA-WSR-DC-1, 2, and 4, and SA-WSR-G-1. A management approach has also been added to this section to remind forest managers to coordinate with neighboring Forests on the management of designated and eligible wild and scenic rivers.

Comment:

In summary, we endorse Alternative C's potential wilderness recommendations; and the alternatives general response to public recommendations that significantly more lands should to be managed in primitive and natural settings with reduced human-related disturbance for the benefit of recreation, botanical, and wildlife resources. (Forest Service 2013a:19-20).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

Sycamore Canyon Wilderness We endorse the designation of a Railroad Draw potential wilderness. We agree that the addition would enhance the wilderness character of Sycamore Canyon, as well as benefit species including Mexican spotted owl, bald eagles, and riparian species (Forest Service. 2013b:27)

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

Kachina Peaks Wilderness We support adding this 436-acre to the existing wilderness to enhance habitat for a variety of species including the northern goshawk, the cultural value to Native Americans, enhancement of Kachina Peaks' wilderness character, and for the administrative reasons outlined by the Forest Service. (Forest Service. 2013b:15-17).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

Strawberry Crater Wilderness We strongly endorse protection as a designated potential wilderness this 6,704-acre addition to the existing Strawberry Crater Wilderness; and agree with the agency's conclusion that designation would further protect places of traditional cultural importance to the Hopi and Navajo. (Forest Service. 2013b:13)

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

Davey's (1,901 acres); We concur with the agency's report that wilderness potential designation would benefit native species razorback suckers, spokedace, loach minnows and spring snails; and that the wilderness character, e.g., opportunities for solitude, of Fossil Springs would increase. (Forest Service. 2013b:68).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

Black Mountain (9,850 acres). We concur with the agencies findings that potential wilderness designation would provide significant protection of the areas rare and limited cottonwood willow riparian forest and mixed broadleaf deciduous riparian forest ecosystem. We agree that golden eagles, Chiricahua leopard frogs, bald eagles and southwest willow flycatchers would benefit from the preservation of primitive surroundings in the Black Mountain potential wilderness. (Forest Service. 2013b:46,48).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating

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Comment:

The Draft Forest Plan mentions that the alpine tundra is extremely rare, covering only 941 acres, and ecologically and culturally important: “the only area containing bristlecone pines located on National Forest System lands in Arizona; it is also one of the southernmost extents of Alpine Tundra in the continental U.S.”; “it supports a federally threatened plant – San Francisco Peaks ragwort – that is only found here, as well as other endemic plant species”; “probably the most significant cultural area on the Coconino NF.” (Draft Plan, p. 70) And, it is threatened by the Arizona Snowbowl ski area: “Major human disturbances are developed recreation from the ski area....” (Draft Plan, p. 70). Yet, here it does not address ways to protect this area from this listed threat. The Forest Service should have a significantly more detailed plan on how you intend to adequately address and remedy this.

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions such as particular actions to address potential threats to a species or habitat type. Decisions to take particular actions to address potential threats to a species or habitat type are determined during project-level planning, which would include recreation special use permits such as Snowbowl. No objectives have been added for the Alpine Tundra ecological response unit. However, the Forest Plan does contain direction that encourages maintenance, protection, and improvement of alpine tundra. Desired conditions for the Alpine Tundra ERU support and sustain rare or narrowly endemic species and provide habitat for San Francisco Peaks ragwort, a federally listed species and other native biota. See FW-TerrERU-AT-DC-1 and 2. If this desired condition is not being met, an objective is not necessary for the Forest to consider a project to address the problem. Plan language includes guidelines in Alpine Tundra and standards and guidelines under Designated Wilderness specific to the Kachina Peaks Wilderness (which contains alpine tundra) that protect and maintain this sensitive resource. See FW-TerrERU-AT-G-1. An objective for Designated Wilderness Areas would rehabilitate wilderness sites that have been impacted by recreation. See SA-Wild-O-1. Desired conditions in Designated Wilderness emphasize education, interpretation and wilderness resources, as do several guidelines. See SA-Wild-DC- 2, 3, 9, 10, and 11. Plan standards in the Kachina Peaks Wilderness further protect alpine tundra by only allowing recreational activities off trail when there is sufficient snowpack; by prohibiting overnight camping and recreational livestock; and by avoiding important habitat for the San Francisco Peaks ragwort when constructing new routes. See SA-Wild-S-3, 4, and 5. In addition, desired conditions in Recreation and in Special Uses promote recreation opportunities balanced with the capacity of forest resources to support them, minimal user and resource conflicts, and compatibility with resource protection. See FW-SpecUse-DC-7 and FW-Rec-All-DC-6. Other plan components protect alpine tundra by not allowing horse and pack stock on Humphrey's Trail and Weatherford Trail above Doyle Saddle, and not permitting recreational livestock in the watersheds draining into the Inner Basin Management Area. See MA-Peaks-S-1 and 3 and MA-InBsn-S-1.

Comment:

Deadwood Draw (11,939 acres). Conservationists presented a detailed outline regarding this addition to the existing Wet Beaver Wilderness (GCWC and AWC 2010). We concur with the agency's findings that northern leopard frogs, four spotted skipperling, and at least five species of bats would benefit from potential wilderness designation (Forest Service 2013b:31). We agree with the agency conclusion that potential wilderness designation would enhance the Wet Beaver's wilderness character. (Forest Service 2013b:32.).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismarck, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating

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Commenter: Gitlin, Alicyn

Comment:

“Gravity Riding” or steep downhill mountain biking should occur in an area where it can be transparent (as opposed to the current illegal and covert activities), sustainable, continuously managed and controlled, mitigated, monitored, evaluated, and fees to cover expenses incurred (i.e., liability insurance, soil mitigation) can be collected by the Forest Service or a contracted concession. A prime location example is Snowbowl or Wing Mountain where commercial activities already exist. The primitive and pristine setting of Mt. Elden is NOT the place for this destructive and illegal activity to occur.

Response:

The Forest Plan provides the framework that would guide site-specific consideration of this activity. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. The Forest Plan also has guidance on user conflicts. See FW-Rec-All-G-2. Whether this activity is impacting desired conditions in a particular area and how to manage this activity is a site-specific decision. The identification of specific prohibitions on mechanized travel would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212). For these reasons, a standard has not been added in response to these comments. Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. The level of Forest Service law enforcement is dependent on staffing, which is reflective of the budget allocated to the Forest Service from Congress.

Comment:

FW-Rec-Disp-O Regarding Objective #1 on p. 106 - Develop 2 to 8 systems of designated bike trails, equestrian trails, and/or motorized trails to adequately provide for these user groups and reduce conflicts between user groups within 10 years of plan approval. We feel this is not acceptable due to the fact that so little has been done up to this point in way of monitoring, enforcement, education and signage. Before increasing the number of trails, the Forest Service should demonstrate that increasing the number of trails won't also lead to increased creation of social trails, both to the trails themselves and to existing dispersed camping area corridors. The result can often be acute erosion of natural areas on either side of forest roads, as evidenced by Figures 10-15.

Response:

The Trails and Trailheads objective neither requires nor prohibits new motorized trails, but new motorized trails would be a possibility under the Forest Plan. See FW-Rec-Trails-O-1. Decisions on whether to add new motorized trails will be based on a site-specific evaluation and guided by many plan components. For example, a desired condition in the Trails section expresses a desire for a system of well-marked and well-maintained sustainable trails. See FW-Rec-Trails-DC-1. The Forest Plan addresses the other concerns expressed in the comment as follows:

MONITORING The purpose of the monitoring plan in the Forest Plan is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the Forest Plan. The monitoring and evaluation report is intended to inform adaptive management of the plan area especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions: What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes can be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The Forest Plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. All of the monitoring and evaluation timeframes identified in this chapter begin from the date of the record of decision.

ENFORCEMENT. Laws and regulations, and the enforcement of them, are not Forest Plan level decisions. Enforcement is not a Forest Plan component but is a requirement of the Agency, regardless of the land management plan in effect.

A Trails and Trailheads guideline requires these facilities to be designed, built, rerouted, or maintained to prevent conflicts with neighboring lands and address impacts to other resources. See FW-Rec-Trails-G-1

EDUCATION AND SIGNAGE. One of the guidelines in the Roads and Facilities section has been expanded to require signage that facilitates navigation of designated motorized routes and prevents motorized use outside of designated areas and routes. See FW-RdsFac-G-3. Additional direction is located in the Interpretation and Education section. A desired condition in this section creates an express goal to provide forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to work with others to establish interpretive messages and programs for designated motorized routes and areas. It states: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

New Social Trails The Forest Plan addresses the problem of unplanned user-created trails in a number of plan components. First, the Forest Plan seeks to create a recreation environment that eliminates the urge for users to create unplanned trails. This recreation environment involves providing a

trail system that meets users needs and expectations and educating users about the potential impacts associate with off trail use. Plan components addressing the Forest's desire to meet trail users' needs and expectations can be found in FW-Rec-All-DC-4 and 6, FW-Rec-Trails-DC-1, 2, and 3, and FW-Rec-Trails-G-1. Plan components addressing educating trail users can be found in FW-InterpEd-DC-1 through 5, and FW-InterpEd-G-1, 2, and 3. A management approach in the Interpretation and Education section reminds forest managers to share Leave No Trace and Tread Lightly concepts and practices in forest interpretation and visitor education. The Forest's overall goal on this topic is summed up in a desired condition in the Trails section that notes that trail use remains on trails and unplanned, user-created trails are rare. See FW-Rec-Trails-DC-11. Second, the Forest Plan provides guidance on how to address unplanned, user created trails. A Trails guideline requires unplanned, user-created trails to be managed to prevent future access and to be rehabilitated to accelerate recovery and to prevent further resource impacts. See FW-Rec-Trails-G-3. A standard in the Special Uses section requires permit holders to rehabilitate unplanned, user-created trails that were not authorized under their special use permit. See FW-SpecUse-S-2. Finally, a guideline in the Heritage section requires unplanned user-created trails that lead to archaeological sites be eliminated. See FW-Hrtg-G-4.

Draft

Comment:

Tin Can (4,010 acres). We agree with FS findings that Chiricahua leopard frog would benefit and that the overall wilderness character of Fossil Creek Wilderness would be enhanced. (Forest Service. 2013b:46,62-63).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Gitlin, Alicyn

Comment:

identify enforcement mechanisms for addressing illegal dumping associated with recreational target shooting;

Response:

No change to the plan has been made in response to this comment. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect.

Commenter: Gitlin, Alicyn

Comment:

The following desired condition at page 104 of the Draft Forest Plan should be edited as follows: “7. Resource damage from unauthorized motorized trails is minimal and unauthorized trails are rehabilitated to prevent future access by the public and to mitigate long term soil and water impacts. ENFORCEMENT AGAINST UNAUTHORIZED USES IS HIGHLY VISIBLE AND OCCURS WHENEVER UNAUTHORIZED USES ARE ENCOUNTERED BY LAW ENFORCEMENT OFFICERS. Motorized trails are located with minimal TO MINIMIZE impacts to sensitive resources such as cultural sites, highly erodible soils, water, and wildlife and botanical resources. Poorly located trails are redesigned or relocated. THE DESIGNATED MOTORIZED ROUTE SYSTEM MATCHES THE FISCAL REALITIES OF THE FOREST.”

Response:

Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. The level of Forest Service law enforcement is dependent on staffing, which is reflective of the budget allocated to the Forest Service from Congress.

Commenter: Gitlin, Alicyn

Comment:

Adopt a 1 mile of road per square mile of land road density standard and add direction on how this density is calculated (explained more fully below);[...] b. The Draft Forest Plan Should Identify a Route Density Standard The Draft Forest Plan should adopt guidance limiting road density to no more than 1 mile of road per square mile of land. This route density should be calculated to include all motorized routes (roads and trails) whether open or closed (e.g., all ML1-5 routes in the INFRA database and all motorized trails) and all known user-created routes, is calculated at the 6th HUC, and excludes Wilderness, Inventoried Roadless, or other areas where roads are prohibited. This would make the road density standard clear, meaningful for planning purposes, and would help the Forest Service move the forest toward the desired conditions for ecosystem resiliency, biological diversity, and long-term productivity. It would also allow the Forest Service to work within the financial realities faced now and expected over the long term.

Response:

No change was made in response to this comment. Specifying road densities is an alternative that was not carried forward for detailed consideration because road impacts are more complex than a simple road density calculation. See the Alternatives Eliminated from Detailed Study section in Chapter 2 of the FEIS for additional information.

Commenter: Gitlin, Alicyn

Comment:

Adopt Wildlands CPR’s Best Management Practices for management of roads and off- road vehicles as part of this plan revision (Attached as Appendix 1);[...]Adopt Wildland CPR’s BMPs for Roads We have attached this document as Appendix 1.

Response:

The Best Management Practices for Off-Road Vehicle Use on Forestlands developed by Wildlands CPR and Wild Utah Project have not been adopted by the Forest Plan. This document refers to the Best Management Practices that occur in policy and handbook direction. Best management practices from other sources, as well as suggestions for design features and mitigations, can be considered at the project level under best available science.

Commenter: Gitlin, Alicyn

Comment:

The Forest Plan should incorporate Executive Orders 11644 and 11989 as Forest-wide Standards. Executive Order 11644, signed by President Richard Nixon in 1972, requires federal public land agencies to designate specific areas and trails on which off-road vehicles may be allowed and where they are prohibited. The designation of specific areas and trails must consider the protection of natural resources, promote the safety of all users, and minimize conflicts among users. Public land managers are required to minimize impacts to soil, watersheds, vegetation and other public land resources and minimize the harassment of wildlife. Executive Order 11989, signed by President Carter in 1977, strengthened the earlier Executive Order by also requiring that whenever an agency head determines that off-road vehicle use will cause or is causing considerable adverse effects to the soil, vegetation, wildlife, habitat, or cultural or historic resources, these areas be closed immediately to the type of use causing the adverse effects until those effects have been eliminated and future damage is prevented.

Response:

From the context of the comment, it is assumed that both commenters are referring to EO 11644 (Use of off-road vehicles on the public lands), not EO 11611 (Inspection of Income, Excess Profits, Estate, and Gift Tax Returns by the Committee on Internal Security, House of Representatives). While the plan provides guidance for managing impacts from motor vehicles (for example, see FW-Rec-Disp-S-1), it does not restate existing law or policy, such as Executive Orders 11644 and 11989. EO 11644 was listed in the Vegetation section in Appendix D, Other Sources of Information, of the Forest Plan. It has been retained in the Terrestrial Ecological Response Units section in Appendix D. EO 11989 has been added to the list in the Terrestrial Ecological Response Units section in Appendix D.

Commenter: Gitlin, Alicyn

Comment:

e. Noise The Draft Forest Plan should state a standard limiting use of vehicles below a decibel range of 96 to protect quiet recreation opportunities and wildlife.

Response:

No change has been made to the Forest Plan in response to this comment. Although the Forest Plan does restrict sound associated with vehicles to a particular level, this concern could be addressed through travel management planning and other project-level decisions. Several plan components provide guidance related to potential impacts from motor vehicles associated with sound. One plan component expressly mentions the desire for natural soundscapes that are consistent with ROS objectives. See FW-Rec-All DC-10. A Recreation guideline directs recreational activities to be managed to have minimal user conflicts. See FW-Rec-All-G-2.

Commenter: Gitlin, Alicyn

Comment:

Where rare plants and animals, Forest Planning species, and Forest Service sensitive species are negatively impacted by off-road vehicle use, this use should be prohibited and a Forest-wide Standard should be the mechanism for prohibiting this use. We make this recommendation because all of these same species are impacted by stressors that are out of the Forest's control (e.g., drought, climate change, stochastic events, border patrol activities) and motorized vehicle use is something the Forest Service should be managing to protect species diversity. We recommend the following as an example of a forest-wide standard: "Off-road vehicle use shall be prohibited where Forest Service sensitive species occur."

Response:

The Forest Plan includes a standard that limits motor vehicle use to the designated system of roads, trails, and areas, as defined on motor vehicle use maps. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1. Adjustments to the motor vehicle use maps would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212) for the Forest. Impacts or potential impacts to sensitive species would be considered and addressed based on site-specific information.

Commenter: Gitlin, Alicyn

Comment:

Noise standards should apply to all anthropogenic noise sources, such as air tours, motor vehicles, shooting ranges, commercial recreation areas, events, etc.

Response:

A plan component related to this concept has been adjusted to have forestwide application and to expressly mention the desire for natural soundscapes that are consistent with ROS objectives. See FW-Rec-All DC-10.

Commenter: Gitlin, Alicyn

Comment:

MONITORING MOTORIZED VEHICLE IMPACTS SECTION 2: DLRMP PAGE 177 – MONITORING STRATEGY Chapter 5, page 183, table 16: As this pertains to all dispersed recreation, we find this time frame ("Every 5 years") of monitoring and reporting inadequate. The amount of potential damage to fauna, wildlife and general human enjoyment of natural settings can be irreversible in such a time frame. There is no way proper enforcement can be implemented with such a monitoring strategy. The Forest service should:

- Provide monitoring and data assessment at least once a year.

RECOMMENDATIONS:

- Employ a realistic monitoring plan as outlined in the Travel Management Evaluation and Monitoring plan, November, 2011:
- In order to achieve yearly monitoring with limited employee resources, employ a rigorous volunteer monitoring and reporting strategy through better public outreach and also partnering with organizations such as the Sierra Club.

Response:

The impacts specifically related to motor vehicles have not been identified as a plan level monitoring item. Monitoring of motor vehicle impacts has been addressed through the travel management process. Specific motor vehicle impact monitoring will continue to be developed and implemented through project-level monitoring plans.

Commenter: Gitlin, Alicyn

Comment:

XIX. AIRCRAFT NOISE “Sedona Amendment 12” (Attached as Appendix 2) should carry over into the current Plan. Sedona Amendment 12 attempts to limit the impacts of air tours, commercial aerial filming, aircraft landings, etc. The Draft Forest Plan cites Amendment 12, but the Forest Service must add soundscape monitoring using audibility and Leq measures in order to determine whether it is improving or maintaining an area’s natural soundscape.

Response:

Management of aircraft in flight is generally outside the scope of the Forest Plan; the Forest has no authority to limit or manage aircraft or helicopters that do not take off from or land on the Forest unless the flight involves some other activity permitted by the Forest Service, such as filming. With this in mind, the Forest Plan includes numerous components that address the potential impacts associated with low flying airplanes and helicopters. The Special Uses standard (prohibiting motorized aircraft landings and takeoffs on the Forest) and guideline (restricting commercial filming by aircraft in the Sedona/Oak Creek area) have been retained. See FW-SpecUse-S-1 and FW-SpecUse-G-13. The inclusion of these components in the Special Uses section gives them forestwide application. The guidelines related to use of aircraft for commercial filming near Sedona and Oak Creek have been retained in the direction for the relevant management areas. See MA-RedRock-G-3, MA-OakCrk-G-11, and MA-SedN-G-4. Management approaches in the Sedona area MAs addresses collaboration with FAA. In a more general manner, the concept of natural soundscapes has been addressed in a forestwide All Recreation desired condition. See FW-Rec-All-DC-10. This component expresses a desire that natural soundscapes are consistent with the Recreation Opportunity Spectrum objectives for an area. Finally, a management approach has been added to the Designated Wilderness section reminding forest managers to collaborate with the Federal Aviation Administration and others to minimize disturbances caused by aircraft over designated Wilderness areas. It states: Collaborate with Federal Aviation Administration, airport administrations, air tour operators, military and government agencies, and other aircraft operators to minimize disturbances caused by aircraft over designated Wilderness areas of the Coconino National Forest. Aircraft disturbances include, but are not limited to, diminishing solitude and primitive recreation opportunities and disruption to key wildlife areas during important times of their life cycle. Examples could include peregrine falcon nesting sites and big game wintering habitat. Encourage aircraft operators to adhere to Federal Aviation Administration’s Notice to Airmen regarding minimum altitudes over wilderness.

Commenter: Gitlin, Alicyn

Comment:

There should be a section in the Final Forest Plan dedicated to the important issue of soundscape. The Forest Plan should include discussion of aircraft and the Sedona airport, which are omitted from the Draft Forest Plan.

Response:

A plan component related to this concept has been adjusted to have forestwide application and to expressly mention the desire for natural soundscapes that are consistent with ROS objectives. See FW-Rec-All DC-10.

Comment:

Please explain what happened to the aircraft elements of Amendment 12 in developing and supporting the proposed Forest Plan, especially in developing alternatives. Address the 1998 Amendment 12 noise/aircraft references, and provide an update, in the Final Plan, about what has been done about aircraft noise. Is the noise more, less, or the same? Document with airport operations data and include an Adaptive Management Plan going forward.

Response:

Management of aircraft in flight is generally outside the scope of the Forest Plan; the Forest has no authority to limit or manage aircraft or helicopters that do not take off from or land on the Forest unless the flight involves some other activity permitted by the Forest Service, such as filming. With this in mind, the Forest Plan includes numerous components that address the potential impacts associated with low flying airplanes and helicopters. The Special Uses standard (prohibiting motorized aircraft landings and takeoffs on the Forest) and guideline (restricting commercial filming by aircraft in the Sedona/Oak Creek area) have been retained. See FW-SpecUse-S-1 and FW-SpecUse-G-13. The inclusion of these components in the Special Uses section gives them forestwide application. The guidelines related to use of aircraft for commercial filming near Sedona and Oak Creek have been retained in the direction for the relevant management areas. See MA-RedRock-G-3, MA-OakCrk-G-11, and MA-SedN-G-4. Management approaches in the Sedona area MAs addresses collaboration with FAA. In a more general manner, the concept of natural soundscapes has been addressed in a forestwide All Recreation desired condition. See FW-Rec-All-DC-10. This component expresses a desire that natural soundscapes are consistent with the Recreation Opportunity Spectrum objectives for an area. Finally, a management approach has been added to the Designated Wilderness section reminding forest managers to collaborate with the Federal Aviation Administration and others to minimize disturbances caused by aircraft over designated Wilderness areas. It states: Collaborate with Federal Aviation Administration, airport administrations, air tour operators, military and government agencies, and other aircraft operators to minimize disturbances caused by aircraft over designated Wilderness areas of the Coconino National Forest. Aircraft disturbances include, but are not limited to, diminishing solitude and primitive recreation opportunities and disruption to key wildlife areas during important times of their life cycle. Examples could include peregrine falcon nesting sites and big game wintering habitat. Encourage aircraft operators to adhere to Federal Aviation Administration's Notice to Airmen regarding minimum altitudes over wilderness.

Commenter: Gitlin, Alicyn

Comment:

FW-Rec-Disp-DC Regarding Desired Conditions for Dispersed Recreation #8 - There is little human litter as a result of effective enforcement, patrols, and use of refuse and recycling facilities. Through a variety of interpretive efforts, people learn about geology, botanical communities, biodiversity, and heritage site etiquette, and they will be motivated to practice careful stewardship. A Sierra Club outings leader collecting baseline trail monitoring data in the Kelly trails area in 2013 found a higher density of trash off major connecting roads such as SR-700, SR-3E and SR-132 than other sections of the area. In other words, this was quite a bit of roadside trash. We also feel that the increased volume of visitors that additional trail systems would bring would only increase the volume of this trash, both off major forest roads and dispersed camping corridors. To achieve this Desired Condition, a Management Approach should be written increase enforcement, enforcement, patrols, interpretive efforts, and use of refuse and recycling facilities. The Forest Service should not create new trail systems until an effective system is put in place that succeeds in curtailing litter problems. The Forest service should also establish Management Approaches, Standards, and Guidelines to:

- Provide explicit language as to what the form of enforcement will be and how often.
- Define where refuse containers will be placed and how often trash will be collected.
- Define these interpretive efforts to educate forest visitors.

RECOMMENDATIONS:

- Provide small but industrial metal refuse containers at every major forest road intersection such as roads 700 (235, 236, 78), 3-E (866, 762), 240 (228) and 132 (132D, 236, 133).
- Provide small but industrial metal refuse containers on all dispersed camping corridor roads.
- Provide educational and informational signage wherever these above trash containers are located.

NOTE: include language as to the penalties of littering Coconino forestlands.

Response:

No changes have been made to the Forest Plan in response to this comment. The enforcement of laws, regulations, and policies are not forest plan-level decisions. Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. Identifying where to place refuse containers and when to collect that refuse are not plan-level decisions. These types of decisions are made at the project-level based on site-specific information. Likewise, the Forest Plan does not define specific interpretive efforts to educate forest visitors about littering. The Forest Plan does include several components that address littering which would guide future projects to address the topic accordingly. See FW-Rec-All-DC-5, FW-Rec-Disp-DC-3, and FW-InterEd-DC-1.

Commenter: Gitlin, Alicyn

Comment:

adopt a Standard that requires hunters on Forest Service lands obtain information on the negative impacts of lead shot on California condors;

Response:

In response to this comment, a forestwide Interpretation and Education section has been modified to acknowledge that the promotion and practice of lead reduction is a desired condition. See FW-InterEd-DC-1.

Commenter: Gitlin, Alicyn

Comment:

We support the statement made in DEIS, volume 2, chapter 3 p. 592-593 under "Recreation Suitability, Alternative C as a guide to future motorized recreation activities. Please refer to it in the Plan: o Because of the increase in recommended wilderness and the delineation of wildlife habitat management areas in alternative C, there would be an increase in acres considered not suitable for new motorized areas, motorized trails, and roads for public access. In addition: o In alternative C, primitive and semiprimitive nonmotorized areas, and Walnut Canyon Management Area would be not suitable for snowmobile use. This would lead to snowmobile use being restricted from recommended wilderness and most special areas. In total, it would restrict snowmobile use, except for authorized use to access private property, on approximately 27 percent (539,374 acres) of the Coconino NF. This would increase opportunities for quiet winter recreation for cross-country skiing and snowshoeing.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Gitlin, Alicyn

Comment:

prohibit recreational target shooting in riparian areas, near stock ponds, in wildlife corridors, in high density recreation areas, and within one mile of residential areas;

Response:

A management approach in Interpretation and Education has been modified to incorporate lead reduction as part of messages to the public. It reads: Forest Service communication and interpretive messages show respect for the diverse backgrounds and needs of visitors. Visitors are well informed and interpretation emphasizes a land ethic that explains how to reduce their impacts on ecosystems and support the Coconino NF's efforts to protect natural resources and wilderness values. "Leave no Trace," "Tread Lightly," fire prevention, wildlife awareness (e.g. lead reduction, Be Bear Aware, Animal Inn, etc.) and archaeological resource protection principles are promoted and practiced by the visiting public.

Commenter: Gitlin, Alicyn

Comment:

prohibit recreational shooting in areas where irresponsible target shooting and associated illegal dumping are a recurring problem and create toxic soil conditions;

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions, such as prohibiting shooting in particular areas. However, the Forest Plan does contain several components that provide a framework to manage recreation activities and encounters. The All Recreation section identifies minimal user and resource conflicts as a desired condition. See FW-Rec-All-DC-6. A guideline in the same section requires recreational activities, locations, and/or settings to be managed to have minimal user conflicts. See FW-Rec-All-G-2. The Dispersed Recreations section contains a desired condition for areas used for dispersed recreation across the forest to retain their natural character to the extent possible and have minimal evidence of human waste and litter, sanitation issues, and resource damage. See FW-Rec-Disp-DC-3. Noise is addressed by an All Recreation desired condition which seeks opportunities for experiencing solitude and natural soundscapes that are consistent with ROS objectives. See FW-Rec-All-DC-10. Finally, the Soil section would address potential impacts through a desire for soil productivity and functions that are sustained and functioning properly within the capability of the site. See FW-Soil-DC-2. Specific determinations on whether and how to address recreational shooting in specific areas would be done through future project-level decisionmaking based on site specific information.

Commenter: Gitlin, Alicyn

Comment:

identify a method for recreational shooting and adaptive management strategies to address problem areas in the monitoring section of the Draft Forest Plan;

Response:

The impacts specifically related to recreational shooting have not been identified as a plan level monitoring item. Specific recreational shooting impact monitoring would be developed and implemented through project-level monitoring plans. Recreational shooting falls under Dispersed Recreation. A desired condition promotes areas used for dispersed recreation across the forest retain their natural character to the extent possible and have minimal evidence of human waste and litter, sanitation issues, and resource damage. See FW-Rec-Disp-G-3. In addition, a guideline in Recreation All would require that recreational activities, locations, and/or settings be managed to have minimal user conflicts, to be in balance with the capacity of other resources to support them, to promote public health and safety, and/or to prevent wildlife access to food, trash, and human waste. See FW-Rec-All-G-2.

Commenter: Gitlin, Alicyn

Comment:

provide the public with a clear mechanism for reporting disturbances caused by the recreational shooting activities of other forest visitors.

Response:

Specific methods for reporting disturbances associated with recreational shooting have not been added to the plan. The plan provides a framework that will guide decisions on specific topics like this. Minimal user conflicts is a desired condition and addressed in a guideline. See FW-Rec-All-DC-6 and FW-Rec-All-G-2. The Forest Plan also seeks to have visitors that are well-informed through a variety of strategically located interpretive facilities and/or efforts, including information boards. See FW-InterpEd-DC-1, 2, and 3.

Commenter: Gitlin, Alicyn

Comment:

In addition to the toxic soil and lead contamination problems caused by recreational shooting, the Forest Service should also address how off-road vehicle use and emphasis areas are impacting soil lead levels. Recreational shooting and off-road vehicle use seem to be closely associated on the forest. Lead from recreational shooting is additive to the problem of lead weights on off-road vehicles and other high clearance vehicles which fall off and can be found in high quantities in motorized emphasis areas. These areas off-road vehicle or motorized emphasis areas need to be assessed for lead contamination and soil lead levels should be monitored.

Response:

A management approach in Interpretation and Education has been modified to incorporate lead reduction as part of messages to the public. It reads: Forest Service communication and interpretive messages show respect for the diverse backgrounds and needs of visitors. Visitors are well informed and interpretation emphasizes a land ethic that explains how to reduce their impacts on ecosystems and support the Coconino NF's efforts to protect natural resources and wilderness values. "Leave no Trace," "Tread Lightly," fire prevention, wildlife awareness (e.g. lead reduction, Be Bear Aware, Animal Inn, etc.) and archaeological resource protection principles are promoted and practiced by the visiting public.

Comment:

WILDLIFE, FISH, AND PLANTS ECOSYSTEM HEALTH AND WILDLIFE The following two Desired Conditions apply to people/recreational use, not species or habitat. They would fit better if rewritten as Forestwide Management Approaches for Fish, Wildlife and Plants: FW-WFP-DC-11: The forest is known for high-quality hunting and fishing opportunities. There is more emphasis, interest, and opportunity to fish for native sport fish. Nonnative sport fish and habitats are managed in locations and ways that do not pose substantial risk to native species. FW-WFP-DC-12: Residents and visitors have ample opportunities to experience, appreciate, and learn about the forest's wildlife, fish, and plant resources.

Response:

The Forest Plan has been adjusted in response to this comment. The Wildlife, Fish, and Plants desired condition relating to the forest being known for high-quality hunting and fishing opportunities has been removed because the concepts were redundant of other plan components or were merged with other plan components. See FW-Rec-Disp-DC-5 and FW-WFP-DC-10. A management approach in the Wildlife, Fish, and Plants section reminds forest managers to coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for native species and the management of sport and native fishes, including the identification of refugia for native fish. It states: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing. The Wildlife, Fish, and Plants desired condition relating to residents and visitors having ample opportunities to experience, appreciate, and learn about the forest's wildlife, fish, and plant resources has been retained, but additional guidance has been added. See FW-WFP-DC-10. As worded, this component properly expresses desired conditions, so it has not been converted to a management approach.

Commenter: Gitlin, Alicyn

Comment:

With that likely scenario in mind, we again support Alternative C. This alternative proposes a total of 13 wilderness areas containing habitat that would be used by wolves and their prey. This would provide 14,208 acres of habitat with reduced disturbance from motorized use and activities. In addition, Alternative C proposes eight wildlife habitat management areas, which would focus on emphasizing wildlife and restoring habitat using establishment of natural fire regimes and reduction of road densities. The Upper Clear Creek watershed along the Mogollon Rim is the closest forest habitat to the western edge of the Blue Range Recovery Area. There are five wildlife habitat management areas in the Upper Clear Creek watershed including East Clear, Hospital Ridge, Knoll Lake, Limestone Pasture, and Second Chance, and all eight are within the Mexican gray wolf MWEPA. Guidelines for wildlife habitat management areas would reduce disturbance associated with recreation and public motorized access compared to alternative A or B. This would positively impact wolves that wander outside of recovery zones by reducing disturbance impacts from recreational and motorized uses (Forest Service 2013:494- 496).

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should provide size and location restrictions for gathering dead and downed firewood. The Forest Service should use downed log sizes to guide what can be taken as firewood. Restrict the removal of snags and dead and downed logs to utility corridors, wildland/urban interface areas and roadsides (i.e., within 0.10 mile of roads). To the extent possible, exclude firewood removal from PACs and PFAs.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan is programmatic in nature and does not make specific decisions on size and location restrictions related to firewood collection. Any specific restrictions on firewood collection would be addressed site specifically at the project-level. The Forest Plan includes a desired condition to provide sustainable supply of forest products (which includes firewood) consistent with other resource desired conditions. Desired levels of snags and dead and downed logs are discussed in the Riparian and Terrestrial ERU sections of the Forest Plan.

Comment:

SNOWMAKING Finally, nowhere in this plan is snowmaking ever mentioned, nor its effects on the rare alpine tundra ecosystem, the federally listed endangered San Francisco Peaks Ragwort, a Traditional Cultural Property, or our future water supply, both quantity and quality. It is incredulous that the Forest Service neglects to create a policy in this Forest Plan to address the subject of one of the most contentious public debates and legal battles that this National Forest has ever encountered. The Forest Service should be prepared for future requests for snowmaking permits, using either fresh or reclaimed water. This Forest Plan revision process is the place to create a policy on snowmaking, and due to the limited water resources in our region, climate projections for a dryer Southwest, and determinations that the City of Flagstaff and State of Arizona water demands will outstrip supplies before 2050, the Forest Plan should declare snowmaking to be an incompatible use on the Coconino National Forest.

Response:

The Forest Plan does not expressly declare snowmaking as an incompatible use on the Forest. However, the Forest Plan does contain several components that provide a framework that can be applied to protect the limited water resources in this region, the federally listed endangered San Francisco Peaks Ragwort, and the San Francisco Peaks Traditional Cultural Property. The Watersheds and Water section includes desired conditions to sustain water quantity (base flows) of intermittent and perennial streams within the historic range of variability. See FW-Water-DC-5. Water quality and water quantity is desired to be at levels that support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities, and, at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. See FW-Water-DC-6. Finally, it is a desired condition for water quality to meet or exceed Arizona water quality standards and support identified designated beneficial uses. See FW-Water-DC-7. To be consistent with the Forest Plan, a proposed activity must be consistent with these desired conditions or a forest plan amendment would be required to authorize the activity. The Forest Plan includes a desired condition for habitat conditions to contribute to the survival and recovery of listed species and contribute to the delisting of species under the Endangered Species Act. See FW-WFP-DC-2. As with the concerns with water quantity and quality, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. The Forest Plan also includes a desired condition for traditional cultural properties to be preserved and protected for their cultural importance. As with the concerns with water quantity and quality and endangered species, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. Accordingly, the strategic approach employed by the Forest Plan provides guidance relevant to the concerns expressed in these comments without being overly prescriptive and dismissing an activity without considering it at the project level where site specific information can inform the decision.

Commenter: Gitlin, Alicyn

Comment:

The following Management Approaches at page 109 of the Draft Forest Plan should be changed as follows: “When developing motorized trails, consider their suitability as MINIMIZE CONFLICTS ON multiple user trails for nonmotorized recreation.”

Response:

The Forest Plan has been adjusted in response to this comment. The management approach from the Dispersed Recreation section mentioned in the comment has been removed from the Forest Plan. User conflicts are adequately addressed in several plan components. Minimal user conflict is a desired condition in the All Recreation section. See FW-Rec-All-DC-6. A guideline in the same section of the Forest Plan requires recreational activities, locations, and/or settings to be managed to have minimal user conflicts. See FW-Rec-All-G-2. A modified guideline in the Trails and Trailheads section effectively addresses the potential for motorized and non-motorized user conflicts by requiring user experience to be considered when trails are being designed or re-routed. See FW-Rec-Trails-G-1.

Commenter: Gitlin, Alicyn

Comment:

“Cooperate with the AZGFD to stock NATIVE fish and provide fishing access to meet goals and objectives of the Arizona Cold Water Fisheries Strategic Plan.”

Response:

The topic relating to coordination on the stocking of fish (including native fish) is addressed in a forestwide Wildlife, Fish, and Plants management approach, which reminds forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish. The Forest Plan has been adjusted in response to this comment. The management approach from the Dispersed Recreation section mentioned in the comment has been divided into two management approaches. One of the management approaches was moved to the All Recreation section. It addresses coordination for fishing access and reminds forest managers to: Coordinate with the AZGFD to provide fishing access to meet goals and objectives of the Arizona Cold Water Fisheries Strategic Plan.

Commenter: Gitlin, Alicyn

Comment:

adopt a Forest-wide Standard that prohibits lead ammunition for target shooting;

Response:

A management approach in Interpretation and Education has been modified to incorporate lead reduction as part of messages to the public. It reads: Forest Service communication and interpretive messages show respect for the diverse backgrounds and needs of visitors. Visitors are well informed and interpretation emphasizes a land ethic that explains how to reduce their impacts on ecosystems and support the Coconino NF's efforts to protect natural resources and wilderness values. "Leave no Trace," "Tread Lightly," fire prevention, wildlife awareness (e.g. lead reduction, Be Bear Aware, Animal Inn, etc.) and archaeological resource protection principles are promoted and practiced by the visiting public.

Commenter: Gitlin, Alicyn

Comment:

Improve management on currently available trail systems before considering any new trail systems.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan creates a framework for managing the trail systems on the Forest. See the plan components in the Trails and Trailheads section. Improving management on an existing system may involve the need to create new trails that might reduce or eliminate ecological impacts or user conflicts. These decisions are made at the project level based on site specific information.

Comment:

We applaud and appreciate all the thought and effort that went into the description of desired conditions for Dispersed Recreation (FW-Rec-Disp-DC). These aspirations are generally generous and lofty in attempting to strike a realistic balance between the preservation and restoration of natural places, and the increasing recreational demands imposed by humans. However, we find an overall lack of detail concerning how, and often when this is to be achieved or implemented, enforced or monitored.

Response:

The desired conditions for Dispersed Recreation, like the desired conditions for all other resources, will guide how activities and uses authorized under the Forest Plan are designed and authorized. Desired conditions are aspirational and it is acknowledged that they may only be achievable over a long time frame. There is no specific date by which they are to be achieved. However, as described in the Plan Content section in Chapter 1 of the Forest Plan, projects and site specific activities "must be consistent with desired conditions" The following information has been added to the discussion on desired conditions in the Plan Content section to clarify the ways site specific projects can demonstrate consistency with desired conditions: To be consistent with the desired conditions of the plan, a project or activity, when assessed at the appropriate spatial scale described in the plan (e.g., landscape scale), must be designed to meet one or more of the following conditions: Maintain or make progress toward one or more of the desired conditions of a plan without adversely affecting progress toward, or maintenance of, other desired conditions; or Be neutral with regard to progress toward plan desired conditions; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward other desired conditions in a negligible way over the long term. One of the ways that the Forest Plan promotes progress towards achievement of desired conditions is through the identification of objectives. The objectives in the Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. Objectives are not targets, but projections, and they may not be fully achieved based on a variety of factors. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. The Forest Plan contains an objective to develop or modify 2 to 8 systems of sustainable designated bike trails, equestrian trails, and/or motorized trails to adequately provide for these user groups and reduce conflicts between user groups. See FW-Rec-Trails-O-1. These new or modified trail systems would help move the Forest towards the Dispersed Recreation desired condition of offering a variety of settings and challenges for a broad range of recreational opportunities in all seasons. See FW-Rec-Disp-DC-1.

Commenter: Gitlin, Alicyn

Comment:

Our comments on Dispersed Recreation may also refer to, or compare to, Developed Recreation, for as stated in Chapter 3 p. 586 volume 2 of the DEIS: Even though the plan desired conditions are divided into developed and dispersed recreation categories, both sections provide direction to consider each resource as part of a larger landscape and recreation experience.

Response:

All of the plan components in the Recreation section were reviewed in response to this comment. In acknowledgement that some of the direction contained in Dispersed Recreation subsection may also apply to the Developed Recreation subsection and vice versa, a new subsection called "All Recreation" has been added to the forestwide Recreation section. Direction that applied to more than just dispersed or developed recreation has been moved into the All Recreation subsection.

Commenter: Gitlin, Alicyn

Comment:

FW-Rec-Disp-DC – pp. 103-104 Regarding Desired Condition #4 – “Motorized routes are easily identified on the ground and on the motor vehicle use map...” Currently signs only inform of non-motorized areas, but few or none identify actual open motorized routes and/or their usage. Add a management approach to provide signage identifying routes as open to motorized vehicle use. This will reduce confusion and promote compliance with regulations, while reducing the problems that result from sign theft. Regarding Desired Condition #4 – “Motorized vehicle use only occurs as identified on the motor vehicle use map (MVUM), except as authorized by permit or for administrative uses.” Regarding Desired Condition #7 – “Resource damage from unauthorized motorized trails is minimal and unauthorized trails are rehabilitated to prevent future access by the public and to mitigate long term soil and water impacts.” We agree with these Desired Conditions but currently, the above statements are far from true. The Forest Service should be specific about how they intend to realistically monitor and enforce these.

Response:

In addition to the desired awareness of travel restrictions included in FW-RdsFac-DC-3, the Forest Plan includes several other components that address this comment. One of the guidelines in the Roads and Facilities section has been expanded to require signage that facilitates navigation of designated motorized routes and prevents motorized use outside of designated areas and routes. See FW-RdsFac-G-3. Additional direction is located in the Interpretation and Education section. A desired condition in this section creates an express goal to provide forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to work with others to establish interpretive messages and programs for designated motorized routes and areas. It states: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

Comment:

Provide explicit language as to how monitoring and enforcement will be implemented and how often.

Response:

The monitoring plan is Chapter 5 in the forest plan. It was sent out for public comment in December 2013. It has been modified in response to public comments. The purpose of the monitoring plan is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the Forest Plan. The monitoring and evaluation report is intended to inform adaptive management of the plan area especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions: What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The Forest Plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. All of the monitoring and evaluation timeframes identified in this chapter begin from the date of the record of decision. The monitoring plan includes the following: Monitoring Question: The question(s) that will be answered. All questions are at the geographic scale of the forest unless indicated otherwise. Metrics and Data Sources: The evaluation criteria and data sources available to evaluate the monitoring questions at the time of plan approval. These are not the required methods of measurement. As new tools become available, other methods may be used to answer the monitoring questions. Frequency of Monitoring: How often information is gathered or measured. Most items are monitored annually. One item is monitored every 10 years. That item asks "Have areas classified as unsuited for timber production become suitable?" Frequency of Evaluation: How often the information is analyzed and reported. Available monitoring information will be evaluated and reported every two years. Data Precision and Reliability: An indication of how rigorous the information used to evaluate the monitoring question is with respect to repeatability, reliability, accuracy, and precision. Two categories of precision and reliability are appropriate at the plan scale, and because of varying methods and data sources used to evaluate the monitoring question, both classes may be indicated. Classes of precision and reliability, however, are not meant to identify which methods and data sources may be most appropriate to answer the monitoring question. Class A: Methods that are generally well accepted for modeling or quantitative measurement. Results have a high degree of repeatability, reliability, accuracy, and precision. Class B: Methods or measurements that are based on project records, personal communications, ocular estimates, pace transects, informal visitor surveys, and similar types of assessments. The degree of repeatability, reliability, accuracy, and precision are not as high as Class A methods, but they still provide valuable information. Monitoring and evaluation are identified, approved, and scheduled through the annual budget process. Actual budget levels, funding emphasis, and emergence of new issues may affect accomplishment of both management activities that make progress toward desired conditions as well as monitoring. Partnerships may be developed to accomplish monitoring and evaluation.

Commenter: Gitlin, Alicyn

Comment:

Add a Management Approach to provide adequate signage identifying not just where motorized vehicles cannot go, but where they can go, to lessen incidences of straying off legal trails and doing damage.

Response:

In addition to the desired awareness of travel restrictions included in FW-RdsFac-DC-3, the Forest Plan includes several other components that address this comment. One of the guidelines in the Roads and Facilities section has been expanded to require signage that facilitates navigation of designated motorized routes and prevents motorized use outside of designated areas and routes. See FW-RdsFac-G-3. Additional direction is located in the Interpretation and Education section. A desired condition in this section creates an express goal to provide forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to work with others to establish interpretive messages and programs for designated motorized routes and areas. It states: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

Commenter: Gitlin, Alicyn

Comment:

Specify standards, guidelines, and management approaches to achieve all Motorized Recreation Desired Conditions.

Response:

The Forest Plan contains a variety of plan components related to motorized recreation. Some of these components are designed to manage motorized recreation and ensure the forest maintains or moves toward its desired conditions. See FW-Rec-All-G-1, FW-Rec-Disp-DC-2 and 4, FW-Rec-Disp-S-1, FW-Rec-Disp-G-1, FW-RdsFac-G-3, FW-InterpEd-DC-5, MA-MtElden-DC-3, MA-Verde-DC-3, MA-LongV-G-1, MA-EastClr-G-1. Other components are designed to reduce potential conflicts between user types. See FW-Rec-Disp-G-6, FW-Rec-Trails-DC-1, 6, and 8, FW-Rec-Trails-G-1 and 6, FW-InterpEd-G-3, MA-VolcanWd-DC-3, and MA-VerdeV-G-1.

Commenter: Gitlin, Alicyn

Comment:

Implement proper signage for existing motorized routes as outlined in the Management Approaches for Dispersed Recreation section of the DLRMP chapter 2 page 108: o Provide signage and information aimed at the following objectives: to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

Response:

In addition to the desired awareness of travel restrictions included in FW-RdsFac-DC-3, the Forest Plan includes several other components that address this comment. One of the guidelines in the Roads and Facilities section has been expanded to require signage that facilitates navigation of designated motorized routes and prevents motorized use outside of designated areas and routes. See FW-RdsFac-G-3. Additional direction is located in the Interpretation and Education section. A desired condition in this section creates an express goal to provide forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to work with others to establish interpretive messages and programs for designated motorized routes and areas. It states: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

Commenter: Gitlin, Alicyn

Comment:

Outline a realistic monitoring plan as outlined in the Travel Management Evaluation and Monitoring plan, November, 2011 for existing motorized routes. (Also see our comments under SECTION 2: DLRMP PAGE 177 – MONITORING STRATEGY)

Response:

The impacts specifically related to motor vehicles have not been identified as a plan level monitoring item. Monitoring of motor vehicle impacts has been addressed through the travel management process. Specific motor vehicle impact monitoring will continue to be developed and implemented through project-level monitoring plans.

Commenter: Gitlin, Alicyn

Comment:

Outline a realistic enforcement plan as outlined in the Coconino National Forest ENFORCEMENT PLAN Implementation of the National Travel Management Rule (TMR) Updated: November 2011 for existing motorized routes.

Response:

No change to the plan has been made in response to this comment. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect.

Commenter: Gitlin, Alicyn

Comment:

A standard establishing capacity limits should apply in areas where resource damage and negative impacts to surrounding lands are occurring, such as Cinder Hills OHV Area. Capacity is never mentioned in regards to motorized recreation (pp. 103-104), though the following Desired Condition is given for Dispersed Recreation (p. 103): Growing demand for recreation is balanced with other forest desired conditions, unless increasing capacity results in unacceptable negative effects on natural resources. Since we can document resource damage occurring in the Forest (i.e., attached photos), capacity based systems should be considered if other methods are not effective at reigning in impacts. The Forest Service should establish a guideline and management approach to achieve the Desired Condition concerning capacity limits.

Response:

The Forest Plan is, by design, strategic in nature and does not identify specific motorized recreation capacity limits for the forest or individual areas within the forest. Setting specific motorized recreation capacity limits for any area in the forest is a project level decision that would be made based on site-specific information and analysis, and therefore not a forest plan level decision. However, the Forest Plan does contain a desired condition for motorized vehicle use to occur at sustainable levels. See FW-Rec-Disp-DC-1. Any future proposed project or activity would need to be consistent with this desired condition. In support of the project level decisions, a forestwide desired condition promotes recreation opportunities that are balanced with the capacity of the forest resources to support them, with minimal user and resource conflicts. See FW-Rec-All-DC-6 and G-2. The Forest Plan also contains a desired condition and a guideline intended to protect areas outside the Cinder Hills OHV area and the Sunset Crater Volcano National Monument. See MA-VolcanWd-DC-3, G-1. A standard in Red Rock Management area would restrict the permitting of new outfitter-guide permits in areas that are at or approaching capacity. See MA-RedRock-S-5.

Commenter: Gitlin, Alicyn

Comment:

The following desired condition at page 106 of the Draft Forest Plan is inadequate and unclear: "Snow-Based Recreation 20. Snowplay activities occur where conflict between motorized and nonmotorized activities is mitigated through signage and design considerations." This desired condition should be changed to reflect the requirement in the Travel Management Rule that the Coconino National Forest designated a system of motorized winter routes (snowmobile routes) that comply with the Executive Orders upon which the Travel Management Rule is based. See 36 C.F.R 212.8 (known as "Subpart C" of the Travel Management Rule).

Response:

As the comment notes, the Travel Management Rule already requires the Forest to designate a system of motorized winter routes. This existing requirement is not being repeated in the Forest Plan, however, the Travel Management Rule is listed in the Dispersed Recreation section of Appendix D of the Forest Plan and referenced in the section titled Recreation and Transportation Suitability. This component has been adjusted in response to this comment. Restated as a guideline, this component requires potential conflicts between motorized and nonmotorized users to be considered when locating and managing dispersed winter recreation and snowplay activities. See FW-Rec-Disp-G-4.

Commenter: Gitlin, Alicyn

Comment:

Adopt Executive Orders 11611 and 11989 as Standards in the Forest Plan.

Response:

From the context of the comment, it is assumed that both commenters are referring to EO 11644 (Use of off-road vehicles on the public lands), not EO 11611 (Inspection of Income, Excess Profits, Estate, and Gift Tax Returns by the Committee on Internal Security, House of Representatives). While the plan provides guidance for managing impacts from motor vehicles (for example, see FW-Rec-Disp-S-1), it does not restate existing law or policy, such as Executive Orders 11644 and 11989. EO 11644 was listed in the Vegetation section in Appendix D, Other Sources of Information, of the Forest Plan. It has been retained in the Terrestrial Ecological Response Units section in Appendix D. EO 11989 has been added to the list in the Terrestrial Ecological Response Units section in Appendix D.

Commenter: Gitlin, Alicyn

Comment:

DLRMP page 108 Under “Management approaches for dispersed recreation” states: “Recognize new activities that occur on forest lands, while upholding the responsibility to protect the natural environment and the multiple use rights of other visitors.” The DEIS volume 2, chapter 3 page 570 states: Increases in motorized uses (primarily 4-wheel drive and all-terrain vehicles) have resulted in somewhat less opportunity for some of the more “primitive” attributes, such as solitude and natural quiet in some areas, for example near popular recreation sites and adjacent to forest bounded communities. We should NOT be setting a precedent where motorized users can continually displace all others in the forest, depreciating their enjoyment of nature and/or their homes. ORV use can be fully incompatible with nature-based enjoyment of the forest and the protection of natural values, and preservation of opportunities for quiet recreation, should take precedence over recreational uses that can damage the environment. The Forest Service should please restrict as much motor vehicle traffic as possible to cities, not nature.

Response:

The Forest Plan has been adjusted in response to this comment. The purpose of this management approach upon which the comment is based was to acknowledge that new types of recreational activities are emerging all the time and to remind forest managers to recognize them as legitimate recreational pursuits. This management approach has been removed from the Forest Plan and the concept of emerging recreational pursuits has been incorporated into the General Description and Background for All Recreation. A desired condition in the All Recreation section seeks to balance recreation opportunities with the capacity of forest resources to support them, to have minimal user and resource conflicts, and to retain recreation settings as the population increases and new forms of recreation emerge. See FW-Rec-All-DC-6. Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. The Forest Plan includes a standard prohibiting motor vehicle use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps. See FW-Rec-Disp-S-1 and FW-RdsFac-S-1.

Commenter: Gitlin, Alicyn

Comment:

ROADS AND FACILITIES The following Desired Condition at page 91 of the Draft Forest Plan should be edited as follows: "FW-RdsFac-DC Roads 1. The transportation system (roads) expands and contracts commensurate with FISCAL REALITIES, use and needs, and it balances the desire for public access with potential for ecological impacts. An economical system of sustainable, well maintained, and marked roads provides diverse opportunities to safely explore the forest and minimizes impact to watershed conditions, rare plants, fisheries, and wildlife habitat and movement."

Response:

No change has been made in response to this comment. The second sentence of this desired condition addresses concerns related to fiscal realities by specifically stating a desire for an "economical system of sustainable, well maintained, and marked roads... ."

Commenter: Gitlin, Alicyn

Comment:

Trails and areas on public lands should be closed to all vehicles unless: i. determined to be appropriate for their use through completion of an analysis, review, and implementation process, and ii. officially posted with signs as being open.

Response:

Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. In general, motor vehicle use is only authorized on routes and areas identified on the Motor Vehicle Use Map that is as part of the travel management process. The Forest Plan includes a standard prohibiting motor vehicle use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps. See FW-Rec-Disp-S-1 and FW-RdsFac-S-1..

Commenter: Gitlin, Alicyn

Comment:

Trails and areas designated for vehicular use must be monitored periodically to detect environmental damage or user interference inconsistent with the above criteria. Where this occurs, the trail or area must be closed to vehicles unless effective corrective regulations are enforced.

Response:

No change to the Forest Plan has been made in response to this comment. The appropriate level of monitoring for routes and areas designated for motorized use is determined as part of the project-level decision to designate those routes and areas. Site specific travel management planning will use the framework set by the Forest Plan (desired conditions, standards, guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted motor vehicle use on designated routes or in designated areas, they could be addressed through site-specific evaluation and analysis. While the plan does not duplicate the Travel Management Rule or the directives, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map.

Commenter: Gitlin, Alicyn

Comment:

Propose new trail systems as an addendum to the main Forest Plan and evaluate suitability on an individual basis.

Response:

The Forest Plan provides guidance develop or modify 2 to 8 trail systems within 10 years of plan approval. See FW-Rec-Trails-O-1. Potential changes to the Coconino NF's trail systems are not plan level decisions, but would be evaluated in separate analysis through future project-level decisionmaking. These decisions would be consistent with the National Environmental Policy Act (NEPA), the Forest Service Handbook and Forest Service Manual and would include analysis and opportunity for public involvement. Site-specific trail planning will use the framework set by the plan (such as desired conditions, standards, guidelines, and suitability determinations) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from trail design or uses, they could be addressed through site-specific evaluation and analysis.

Commenter: Gitlin, Alicyn

Comment:

Ultimately, consider the fact that any increased motorized activity is counter to the natural environment that all non-motorized visitors seek.

Response:

The Forest Plan acknowledges the potential for conflict between recreational user groups. User conflicts are addressed in several plan components. Minimal user conflict is an All Recreation desired condition in the forestwide Recreation section. See FW-Rec-All-DC-6. A guideline in the same section of the Forest Plan requires recreational activities, locations, and/or settings to be managed to have minimal user conflicts. See FW-Rec-All-G-2. A modified Trails and Trailheads guideline in the forestwide Recreation section effectively addresses the potential for motorized and non-motorized user conflicts by requiring user experience to be considered when trails are being designed or re-routed. See FW-Rec-Trails-G-1.

Commenter: Gitlin, Alicyn

Comment:

Consistently restrict motorized activities to keep down noise near residential areas.

Response:

The Forest Plan includes a standard that prohibits motor vehicle use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps. See FW-Rec-Disp-S-1. Residential areas can be a consideration when routes are being considered for inclusion on the motor vehicle use maps. Several adjustments to the Forest Plan have been made in response to this comment. Direction on this topic that was formerly included in a management area was moved into the forestwide direction for Trails and Trailheads in the Recreation section. The guideline requires trails to be designed and located in a way to prevent conflicts with neighboring lands. See FW-Rec-Trails-G-1. Another guideline has been added that more specifically addresses the concern of motorized recreation near residential areas. See FW-Rec-Trails-G-6.

Commenter: Gitlin, Alicyn

Comment:

When conducting Forest user surveys, include local residents and people from effected residential areas, perhaps by mass mailing to gauge how they currently recreate on forestlands, what their expectations are and any potential issues they may have. Then, apply that data in the decision- making process.

Response:

No change to plan direction has been made in response to this comment. Communication plans are developed at the project level and vary depending on the project. However, there are several management approaches in the Trails subsection of the Recreation section of the plan that provide suggestions regarding public engagement during trail planning. These management approaches state: Collaborate with county and city trails coordinators, local groups, and area residents, when conducting trail planning. Consider needs for nonmotorized and motorized trails and provide opportunities for both. Maintain and expand volunteer partnerships with local communities, organizations, groups, and agencies to assist in trail planning, construction, and stewardship. Coordinate trails and trailhead parking with future development on adjacent lands so as to be proactive in designing trails and trailheads to maintain access to public lands and protect resources.

Commenter: Gitlin, Alicyn

Comment:

Increase public outreach informing of proposed trail systems in way of expanded ads, radio announcements, etc. Refer to the Travel Management Implementation Communication Plan, updated 2011, Target Audiences, page 6: o Messages and Themes for each audience will be the same, but the depth of detail and information and delivery methods will vary. The five primary audiences are Internal, Partners, Local Community, Special Interest, and Forest Visitors.

Response:

No change to plan direction has been made in response to this comment. Communication plans are developed at the project level and vary depending on the project. However, there are several management approaches in the Trails subsection of the Recreation section of the plan that provide suggestions regarding public engagement during trail planning. These management approaches state: Collaborate with county and city trails coordinators, local groups, and area residents, when conducting trail planning. Consider needs for nonmotorized and motorized trails and provide opportunities for both. Maintain and expand volunteer partnerships with local communities, organizations, groups, and agencies to assist in trail planning, construction, and stewardship. Coordinate trails and trailhead parking with future development on adjacent lands so as to be proactive in designing trails and trailheads to maintain access to public lands and protect resources.

Commenter: Gitlin, Alicyn

Comment:

Consider additional routes only if absolutely necessary. This includes considering the identification of possible single-use trails, as no non-motorized visitors wish to share trails with noisy, stinky speeding dirt bikes, quads, etc.

Response:

No change has been made to the Forest Plan in response to this comment. The Trails section includes a desired condition stating a goal that multi-use trails are more common than single-use trails. See FW-Rec-Trails-DC-5. This will guide future trails projects to co-locate user groups when appropriate. A management approach in the Trails section also reminds forest managers that multi-use trails are preferred over single-use trails. It states: In general multi-use trails are preferred, though single-use trails may be considered where trail design features cannot be provided to mitigate user conflicts or provide for a sustainable recreation settings between multi-use types.

Commenter: Gitlin, Alicyn

Comment:

Consider signage on multi-use trails to say that, ""while these trails are primarily-designed for motorized use, all users are welcome". This way, non-motorized users are forewarned and can choose not to use a trail, yet no one is absolutely restricted. Thus, it is officially a multiuse trail, with a "suggested preference" of use.

Response:

In addition to the desired awareness of travel restrictions included in FW-RdsFac-DC-3, the Forest Plan includes several other components that address this comment. One of the guidelines in the Roads and Facilities section has been expanded to require signage that facilitates navigation of designated motorized routes and prevents motorized use outside of designated areas and routes. See FW-RdsFac-G-3. Additional direction is located in the Interpretation and Education section. A desired condition in this section creates an express goal to provide forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to work with others to establish interpretive messages and programs for designated motorized routes and areas. It states: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

Commenter: Gitlin, Alicyn

Comment:

On trails with high user conflicts, if user conflicts cannot be mitigated, consider why: is it because of high levels of erosion or trail degradation? Noise and odor associated with motorized use? Speed and safety concerns? Wildlife disturbance? If resource damage or safety concerns are an issue, offending activities should be removed from high conflict areas.

Response:

The Forest Plan provides strategic guidance on managing user conflicts. Minimal user conflict is an All Recreation desired condition in the forestwide Recreation section. See FW-Rec-All-DC-6. A guideline in the same section of the Forest Plan requires recreational activities, locations, and/or settings to be managed to have minimal user conflicts. See FW-Rec-All-G-2. A modified Trails and Trailheads guideline in the forestwide Recreation section effectively addresses the potential for motorized and non-motorized user conflicts by requiring user experience to be considered when trails are being designed or re-routed. See FW-Rec-Trails-G-1. Decisions to close an area to a particular recreation activity are made at the project level based on site specific information.

Commenter: Gitlin, Alicyn

Comment:

Please consider the above Management Approaches to supplement the following: o Page 588 of the DEIS states: While all trails on the forest are currently managed for multiple uses, the modified proposed action recognizes not all trails are well suited for this strategy and, consequently, has a management approach to consider single-use trails where user conflict cannot be mitigated.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Gitlin, Alicyn

Comment:

The Standards for Dispersed Recreation on page 106 of the Draft Forest Plan should be changed as follows: FWS-Rec_Disp-S 1. Prohibit motor vehicle AND SNOWMOBILE use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Response:

No change has been made in response to this comment. This standard refers to the motor vehicle use map which has been created in compliance with the Travel Management Rule and specifically designates routes for "motor vehicles." One of the exemptions provided by the Travel Management Rule (36 CFR §212) is for over-snow vehicles. Accordingly, including snowmobiles in this standard would be inappropriate. Use by over-snow vehicles is regulated by 36 CFR § 212 Subpart C and defers to the responsible official to propose restrictions or prohibitions on use by over-snow vehicles under this subpart. Potential restrictions and prohibitions for over-snow vehicles will be addressed in the future project-level implementation of the Travel Management Rule. This travel management planning process will use the framework set by the plan (e.g., desired conditions, standards, guidelines) and would consider potential resource impacts, access needs, public input, and alternative views.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should limit the unnecessary construction of artificial waters and create a guideline that artificial water sources be kept at a distance from aspen patches to protect the trees from elk and cattle.

Response:

The Forest Plan has been adjusted in response to this comment. Several guidelines associated with range developments have been merged to create one guideline on this topic. See FW-Graz-G-4. This guideline requires structural range improvements to be located, constructed, reconstructed, maintained, and used in a manner that is consistent with the desired conditions of other resources on the Forest, including aspen. The guideline also requires the consideration of modifying, relocating, or removing existing range improvements that are found to be incompatible with those desired conditions. The need for the construction of any particular artificial waters would be addressed at the project-level.

Comment:

We would also like to see language in the Final Forest Plan that suggests a strategy of working with private landowners to educate them about the dangers to human health, water quality, and fish and wildlife habitat posed by old and leaking septic tank systems. This is an easy to implement management strategy that would begin to address another major contributor to E. coli pollution problems and that is also within the ability and scope of the Forest Service's management role in the Coconino.

Response:

Arizona Department of Water Resources is responsible for monitoring water quality. Local county health departments are responsible for advisories restricting designated uses such as swimming. Two Management Approaches were added to the Watersheds and Water section, which state: Collaborate with volunteers, other agencies, private landowners, and other stakeholders on education, interpretation, and monitoring relating to water quality, public health, and fish and wildlife habitat especially in regards to threats to water quality from leaking septic tank systems; threats to water supply and water quality from wildfires; threats to downstream resources from the use of fertilizers; and threats to health and resources from improper disposal of diapers and other garbage or when state water quality standards have been exceeded. Provide input and recommend strategies for implementation plans as required by Arizona Revised Statute 49-234 for existing TMDLs to provide strategies to reduce existing pollutant loads identified in TMDLs and to be in compliance with applicable water quality standards for impaired waters. Restricting access and human use is an action that could be taken if water quality is not in desired condition. A decision to implement these type of restrictions would be based on site-specific information and analysis. The forest plan has several plan components relating to water quality including meeting, or exceeding Arizona water quality standards, improving water quality, and implementing approved total maximum daily load recommendations for impaired or non-attaining waters. See FW-Water-DC-7, FW-Water-G-5, FW-Rip-All-DC-3 and 4. A guideline in the Oak Creek Management Area would require recreation management to maintain water quality. See MA-OakCrk-G-9. Finally, an item in the Monitoring Plan would track forest changes to Arizona Department of Environmental Quality impaired or non-attaining list.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service also fails to mention or discuss the use of reclaimed water within forest boundaries. While specific projects utilizing reclaimed water, as well as their approval, are outside the scope of the Draft Forest Plan and DEIS, their potential impact on water quality within the forest is significant enough to merit discussion within the cumulative effects analysis and also to merit specific standards and guidelines pertaining to reclaimed water use. Given the ongoing drought and significant demand for water within the forest, it is advisable and necessary for the Forest Service to address this and other potential outside water sources in a meaningful way within the Final Forest Plan.

Response:

The Forest Plan does not authorize the use of reclaimed water for snowmaking or any other particular use. The Forest Plan establishes plan components that will guide decisions on projects and activities that are made after it is in effect. For example, the revised Forest Plan includes desired conditions for watersheds to be functioning properly and to exhibit high geomorphic, hydrologic, and biotic integrity within their inherent capability. See FW-Water-DC-1 and 2. A desired condition for the Alpine Tundra ERU seeks to maintain the attributes and processes that contribute to the ecological diversity and habitat for native biota in the ERU. See FW-TerrERU-AT-DC-1. New decisions on the use of reclaimed water for snowmaking will need to be consistent with these desired conditions and all of the other guidance in the Forest Plan. Past decisions are outside the scope of the plan. The effects of existing authorizations for snowmaking and use of reclaimed water on alpine tundra and the species and cultural values associated with alpine tundra were analyzed in the decision to authorize use of reclaimed water and snowmaking.

Commenter: Gitlin, Alicyn

Comment:

Finally, in the DEIS section addressing Aquatic Systems, there is a paragraph concerning wilderness and wildfire that seems to be misplaced. (DEIS at 56, paragraph 3). We would ask that this passage is either removed or is edited to provide additional clarification as to why it is relevant to the discussion of water quality.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Comment:

the management approaches and guidelines presented in the Draft Forest Plan are not sufficiently clear to allow for assessment of how the Forest Service will structure its activities to obtain these rights or for which streams they will seek instream flow rights. The Forest Service can apply for instream water rights from the Arizona Department of Water Resources only through a lengthy process that requires submission of five years of streamflow measurement data after the initial application is accepted. ARS § 45-152.01 (2014). According to the DEIS, the Forest Service already has submitted an application and is tracking streamflow measurements for four streams. (DEIS at 57). Additionally, six streams in the Coconino already have certified water rights held by the Forest Service for instream flows. Id. This is excellent progress, but more substantive guidance on tracking streamflow and identifying streams requiring instream flow rights is needed in the Final Forest Plan. Moreover, the Forest Service has acknowledged that a detailed analysis of water supply on the Coconino has not been done. (DEIS at 58).

Response:

The language relating to maintenance and procurement of instream water rights has been adjusted in the in the Water section in response to your suggestion. Maintenance of existing water rights is addressed in FW-Water-DC-6, which states: Water quality, water quantity and the timing of water flows support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities. Water quality, water quantity, and the timing of flows are sustained at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. Procurement of instream water rights is address in FW-Water-G-3, which states: Instream flow water rights should be procured for those streams without instream water rights to ensure that sufficient flow is provided for aquatic species, habitat, and recreation. In addition to FW-Water-G-3, there are multiple management approaches in the Water section which identify priorities and expectations for the Water program in the future. These management approaches remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest.

Commenter: Gitlin, Alicyn

Comment:

Without including monitoring requirements for water flows and supply, there is no way for the Forest Service to meet NFMA requirements to provide quantitative estimates for water quantity to track progress on the water quantity goals and guidelines contained in the forest plan. To remedy this problem, we recommend incorporating a monitoring question that asks “What are the status and trends for water supply and streamflow within the Coconino National Forest?” This monitoring should take place forest-wide and use the same methods used to track streamflow measurement data for instream water rights applications. This monitoring, which we would suggest completing annually on a seasonal basis, will allow the Forest Service to identify the success or failure of meeting the desired conditions and guidelines for water quantity contained in the Draft Forest Plan. Additionally, such monitoring will give the public a better understanding of water supply trends in the Coconino leading to better management decisions and public awareness about water resources.

Response:

Two items have been added to the Monitoring Plan in response to these comments. One would track the number of water rights procured or water right filings made, and the other would track peak flows and annual flows for three major streams: Oak Creek, Beaver Creek, and Fossil Creek.

Draft

Comment:

Atmospheric concentrations of greenhouse gases influence global and regional climate systems (Seager and Vecchi 2010). Climate change may significantly affect biodiversity, forests and water availability, though the degree of effect is uncertain. Climate change already influences survival, abundance and distribution of forest vegetation at community and landscape scales in the western United States, including northern Arizona. Elevated temperatures above “pre-settlement” and current baseline levels are “locked in” due to existing atmospheric greenhouse gas concentrations, and may fundamentally alter the geographic distribution and composition of vegetation communities in the Coconino National Forest over the life of the revised forest plan. One implication of these phenomena is that management activities oriented to restoration of so-called “reference conditions” based on historic ranges of variability may not be appropriate or sustainable. Indeed, climate change, landscape fragmentation and noxious weed invasions preclude forest ecosystems from realizing settlement-era structural or compositional patterns even with active restoration. Therefore, framing desired conditions and restoration objectives around a “future range of variability” that accounts for inevitable change to disturbance regime (e.g., fire) and vegetation pattern may better promote ecological resilience. Understanding how forests adapt to climate over long timescales (i.e., millennia) can inform management strategies that support resilience to uncertain, though estimable, future conditions. The range of conditions that might sustain adapted ecological functions and biological diversity, including an active fire regime in ponderosa pine and mixed conifer forests, would constitute appropriate “reference conditions” in the revised forest plan. Reference conditions and, by extension, desired conditions, should account for forest structure, composition and functions at multiple spatial and temporal scales in order to: (1) determine what factors cause ecological degradation; (2) identify what needs to be done to restore forest ecosystems; and (3) inform criteria for measurement of restoration treatment effects.

Response:

Reference conditions (based on the historic range of variation) and climate change were considered when determining the desired conditions. Reference conditions are considered a "best" estimate of a resilient and functioning ecosystem because they reflect the evolutionary and historical ecology of forests. Reference conditions are thereby a powerful template for improving the resiliency of fire-adapted forests. By restoring resiliency, current fire-adapted forests will be better able to adapt to climate change. Climate change is addressed throughout the plan: indirectly through desired conditions in the form of functional ecosystems and resilient landscapes and directly in management approaches and the monitoring strategy, where appropriate.

Comment:

Restoration is an appropriate management objective for the revised forest plan. Fire exclusion, livestock grazing and logging in ponderosa pine and mixed conifer forests may have altered ecological structure, composition and function such that existing systems are vulnerable to irretrievable loss (Allen et al. 2002). In some cases, ecological restoration necessitates active management of forest structure and fuel loads to compensate for past mistakes. However, effects of past management on historical fire regimes in ponderosa pine and mixed conifer forests are subject to significant scientific uncertainty (e.g., Odion et al. 2014, Williams and Baker 2012). In many cases, passive restoration that includes cessation of activities degrading ecosystems (e.g., fire exclusion and livestock grazing) may be sufficient to accomplish restoration. The revised forest plan should establish criteria for active and passive restoration accounting for uncertainty associated with past management effects and the “future range of variability” of ecological conditions that may become resilient to climate change.

Response:

The Forest Plan provides a comprehensive framework to guide future decisions on projects and activities on the Forest. The Forest Plan includes desired conditions for functioning and resilient resources based on a range of historic conditions. The Forest Plan includes other components that ensure that projects and activities are designed in a manner that maintains or moves the Forest toward these desired conditions and prevents ecological harm. In response to this comment, a definition for the term "restoration" has been added to the Glossary. It states that restoration is: The process of assisting in the recovery of an ecosystem that has been degraded, damaged, or destroyed (Society for Ecological Restoration International, 2004). Ecological restoration focuses on establishing or re-establishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions. The decision to restore an area and what techniques might be appropriate (e.g. active or passive restoration) would be made at the project level based on site specific conditions, not at the forest plan level. Site specific conditions would include current and desired vegetation conditions, fire or disturbance history, threats, and other resource values. The decision on whether wildland fire is the appropriate tool for use at a particular time and place is decided at the time of natural ignition. Wildland fire may be a tool in areas where mechanical treatments are not appropriate, such as in wilderness. Considerations in deciding whether wildland fire is an appropriate tool could include, but are not limited to, fuel loading, proximity of wildland urban interface, threats to life and property, fire regime, capacity to manage the fire, and weather. The Forest Plan provides desired conditions that will guide future management. A desired condition in the Fire section acknowledges the desire for wildland fires to burn within the historic fire regime of the vegetation communities affected. See FW-Fire-DC-2. If wildland fire is used as a restoration tool under the Forest Plan, it will need to meet or move towards the desired conditions in the Forest Plan. Wildland fire may not always be the appropriate tool to achieve restoration in every situation. In areas where fire has been removed from the landscape over a long period of time, introducing fire without some level of mechanical treatment could result in uncharacteristic fire behavior, which would not meet the desired conditions of other resources or programs on the Forest. See FW-Eco-DC-3 and FW-TerrERU-DC-DC-3.

Comment:

Ongoing climate change is likely to produce increased frequency, extent, and severity of unplanned fires in ponderosa pine forests. (Williams et al. 2010, Westerling et al. 2006). Desired conditions in the revised forest plan should account for more than the degree of presumed departure from a narrowly-defined historical condition (i.e., "fire regime condition class"). As stated above, reference conditions that existed in the late-19th century are not repeatable or sustainable in a changing climate. Natural fire process, however, is inevitable, and it is centrally important to restoration of ponderosa pine forests. (Allen et al. 2002, Falk 2006). An active fire regime can regulate ecosystem structure and composition to "re-establish a new dynamic equilibrium," and track climate effects on vegetation and landscape pattern. (Falk 2006: 142).

Response:

Reference conditions (based on the historic range of variation) and climate change were considered when determining the desired conditions. Reference conditions are considered a "best" estimate of a resilient and functioning ecosystem because they reflect the evolutionary and historical ecology of forests. Reference conditions are thereby a powerful template for improving the resiliency of fire-adapted forests. By restoring resiliency, current fire-adapted forests will be better able to adapt to climate change. Climate change is addressed throughout the plan: indirectly through desired conditions in the form of functional ecosystems and resilient landscapes and directly in management approaches and the monitoring strategy, where appropriate. In addition, adaptability is key, both in terms of the forest's capacity to adapt to changing conditions, and the Forest Service's ability to adaptively manage. Implementation of the forest plan is intended to contribute to forest resources and terrestrial and riparian ecosystems ability to adapt to climate change. See FW-Eco-DC-1; FW-Soil-DC-2; and FW-TerrERU-All-DC-2. A management approach in all Terrestrial ERUs reminds managers to consider approaches to mitigate water stress and to facilitate the potential shift of vegetation from lower to higher life zones. It reads: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. The monitoring and evaluation report is intended to inform adaptive management of the plan area especially in light of changing social or environmental conditions. Finally, as defined in the glossary: Adaptive management is the general framework encompassing the three phases of planning: assessment, plan development, and monitoring (36 CFR 219.5). This framework supports decision-making that meets management objectives while simultaneously accruing information to improve future management by adjusting the plan or plan implementation. Adaptive management is a structured, cyclical process for planning and decision-making in the face of uncertainty and changing conditions with feedback from monitoring, which includes using the planning process to actively test assumptions, track relevant conditions over time, and measure management effectiveness.

Comment:

Precaution should guide decision-making about ecological restoration of systems in which sources of degradation are poorly understood. The precautionary principle counsels against management approaches that cannot be reversed later if they turn out to be counterproductive. Restoration should emphasize active management in areas that are most likely to benefit from intervention. (Brown et al. 2004). Need for restoration depends on ecological scale, disturbance history, vegetation characteristics and current conditions.

Response:

The Forest Plan provides a comprehensive framework to guide future decisions on projects and activities on the Forest. The Forest Plan includes desired conditions for functioning and resilient resources based on a range of historic conditions. The Forest Plan includes other components that ensure that projects and activities are designed in a manner that maintains or moves the Forest toward these desired conditions and prevents ecological harm. In response to this comment, a definition for the term "restoration" has been added to the Glossary. It states that restoration is: The process of assisting in the recovery of an ecosystem that has been degraded, damaged, or destroyed (Society for Ecological Restoration International, 2004). Ecological restoration focuses on establishing or re-establishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions. The decision to restore an area and what techniques might be appropriate (e.g. active or passive restoration) would be made at the project level based on site specific conditions, not at the forest plan level. Site specific conditions would include current and desired vegetation conditions, fire or disturbance history, threats, and other resource values. The decision on whether wildland fire is the appropriate tool for use at a particular time and place is decided at the time of natural ignition. Wildland fire may be a tool in areas where mechanical treatments are not appropriate, such as in wilderness. Considerations in deciding whether wildland fire is an appropriate tool could include, but are not limited to, fuel loading, proximity of wildland urban interface, threats to life and property, fire regime, capacity to manage the fire, and weather. The Forest Plan provides desired conditions that will guide future management. A desired condition in the Fire section acknowledges the desire for wildland fires to burn within the historic fire regime of the vegetation communities affected. See FW-Fire-DC-2. If wildland fire is used as a restoration tool under the Forest Plan, it will need to meet or move towards the desired conditions in the Forest Plan. Wildland fire may not always be the appropriate tool to achieve restoration in every situation. In areas where fire has been removed from the landscape over a long period of time, introducing fire without some level of mechanical treatment could result in uncharacteristic fire behavior, which would not meet the desired conditions of other resources or programs on the Forest. See FW-Eco-DC-3 and FW-TerrERU-DC-DC-3.

Comment:

The vast majority of old growth forest in the ponderosa pine formation of the southwestern United States, including the Coconino National Forest, has been removed by commercial timber harvesting operations in the past century. The ecological significance of old-growth forests and large trees is amply documented. A distinguishing feature of ecologically resilient conifer forests is a prevalence of large trees that possess autecological characteristics (e.g., thick bark, tall canopies) that predispose them to resist heat injury from fire. Forests dominated by large trees also feature structural characteristics in the form of large down logs that tend to inhibit intense fire behavior. Large down trees can slow sub-canopy horizontal wind movement and fire spread, and their tendency to retain moisture can deprive fire of heat energy. Removal of large woody structure can diminish ecosystem resilience to fire. (Brown et al. 2004). The Forest Service is in possession of the collaboratively-designed Old Growth Protection and Large Tree Retention Strategy (“Strategy”) developed by public stakeholders for implementation in forest treatment projects associated with the Four Forest Restoration Initiative. The Strategy is an “agreement-based outcome and product” developed in recognition that “translation of such agreement greatly enhances chances for success, and reduces the risk of conflict.” Given the enormous commitment of stakeholder time and energy to collaborative development of the Strategy, as well as its clear relevance and applicability to the project area, it is reasonable to study, develop and describe in detail management approaches based on the entire Strategy as it was originally designed. It meets the need for change by actively managing hazardous fuels and forest structure, even to the extent that it specifically allows for removal of large trees in limited circumstances, as distinct from a broad “diameter cap.” More, the Strategy avoids significant cumulative impacts that may result from excessive and unnecessary removal of large, fire-resistant trees, which are deficient in the Coconino National Forest. Finally, it mitigates adverse effects to threatened and sensitive wildlife species that require closed canopy forest habitat for essential life behaviors.

Response:

No change to the Forest Plan has been made in response to this comment. The Forest Plan emphasizes old growth structure throughout the landscape including old trees, and promotes replacement trees so that old growth is sustained over time. See FW-TerrERU-PP-DC-5, 6, and 9. Guidelines would protect old growth structure from uncharacteristic natural disturbances and develop it where lacking. See FW-TerrERU-PP-G-1 and 2. Guideline 3 in this same section provides guidance for retaining pre-settlement trees, often the largest, oldest, and tallest trees. See FW-TerrERU-PP-G-3. The plan does not preclude the use of the stakeholder developed Old Growth Retention Strategy at the project level.

Commenter: Gitlin, Alicyn

Comment:

The prairie dog colony at Bonito Park (along 545 Road) should be viewable by visitors to Sunset Crater National Monument. Pronghorn move between Bonito Park in the spring and the Deadman Wash Grasslands near Wupatki National Monument at other times. Manage Bonito Park and Deadman Wash Grasslands in conjunction with NPS.

Response:

A management approach has been added to the Volcanic Woodlands Management Area and Painted Desert Management Area in response to your comment. The management approach encourages coordination with the National Park Service as follows: Coordinate with the National Park Service to develop and ensure compatible management of overlapping resources in this management area. A forestwide desired condition in the Land Adjustments section also addresses this comment. It seeks for most of the forest to have a natural-appearing landscapes that have not lost their wildland character and to retain open space values, including those related to naturally appearing landscapes, wildlife habitat, riparian/wetland character, and recreational opportunities. See FW-LndAdj-DC-1.

Commenter: Gitlin, Alicyn

Comment:

Aspen is not dealt with as a distinct vegetation type, but instead is lumped with other PVNTs in which they occur. This is surprising, given the importance of aspen, its precipitous decline in the Coconino National Forest, and the amount of attention devoted to protection and restoration of aspen by both the Forest Service and the public. For example, the Forest Service and volunteer groups have invested resources in constructing and maintaining elk-proof fencing around aspen plot exclosures, and the Forest Service has indicated that it has a goal to “Achieve 1,000 acres of aspen and maple restoration during the 10 years following plan approval.” (Draft Plan p. 33). It is true that aspen occurs within a variety of other systems, but this deciduous tree is usually managed as a unique component and it definitely has unique threats. Aspen are threatened by elk grazing, drought, disease, and insects; over 90% of the remaining aspen on the Coconino National Forest occur in an area crossed by 13 miles of reopened roads. (USFS 2001, USFS 2013). Further, current management via fencing has the Forest Service treating it as a vegetation type that is meant to remain in a static location over time, even though that is not how this tree evolved. Historically, fire and localized disturbance would have created open patches where aspen clones would have sprouted from extensive root systems. The Forest Service should treat it as its own vegetation type and create standards, guidelines, and management approaches to restore aspen abundance to its historical range of variability.

Response:

Although aspen is not an ecological response unit, the Plan has been reorganized to put the majority of the direction for aspen and maple in a separate section for ease of use and because of their contributions to scenic integrity and bio-diversity. See FW-TerrERU-AspMpl-DC-1, 2, and 3, FW-TerrERU-AspMpl-O-1, FW-TerrERU-AspMpl-G-1, and a management approach, which states: Regularly inspect and maintain fences used to protect aspen and maple to ensure recovery. Aspen is a component of several ERUs and is referred to in the General Description and Background subsections for Gallery Coniferous Riparian Forest, Ponderosa Pine, Mixed Conifer, and Spruce-Fir ERUs. It is included in a management approach in the Wildlife, Fish, and Plants section: Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity. A guideline in the Livestock Grazing section would promote desired conditions for aspen through the appropriate location and use of structural range improvements. See FW-Graz-G-4.

Commenter: Gitlin, Alicyn

Comment:

The Draft Forest Plan establishes a guideline for water quality management that states “[TMDL] recommendations or implementation plans should be considered and implemented as appropriate [as determined by a forest interdisciplinary team].” (Draft Plan at 20). It is unclear from the discussion provided in the Draft Forest Plan and DEIS what circumstances would preclude the application of TMDL recommendations or implementation plans from being used for water quality management in the Coconino. The Forest Service should clarify this direction and identify reasons why the forest team would decide not to implement TMDL guidance.

Response:

A guideline in the Watersheds and Water section has been adjusted to address these comments. The word "considered" has been replaced with "implemented." See FW-Water-G-5. The Forest Plan establishes a framework and strategy for management activities but generally does not prescribe specific approaches, such as how to implement a TMDL. Implementation would be worked out at the project level. There are several management approaches related to TMDLs to provide input and recommend strategies for, and to implement existing TMDLs in Watersheds and Water, and Stream Ecosystems. These management approaches remind forest managers to: Provide input and recommend strategies for implementation plans as required by Arizona Revised Statute 49-234 for existing TMDLs to provide strategies to reduce existing pollutant loads identified in TMDLs and to be in compliance with applicable water quality standards for impaired waters. Coordinate with the Arizona Department of Environmental Quality to monitor and achieve acceptable total maximum daily loads (TMDLs) suspended sediment concentration in the Verde River.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should also discuss fire and wolf reintroductions as tools to restore aspen populations.

Response:

Reintroduction of species is outside of the scope of the plan. However, the topic of reintroductions is addressed by two management approaches in the section on Wildlife, Fish, and Plants which remind forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing. Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity. Updated information on wolf recovery is available on the following website: <http://www.fws.gov/southwest/es/mexicanwolf/>

Commenter: Gitlin, Alicyn

Comment:

Aspen should be allowed to self-thin, and all ages and successional stages should be encouraged.

Response:

The Plan has been reorganized to put direction for aspen and maple in a separate section. Desired conditions in this section acknowledge natural disturbance and the presence of all age classes and successional stages. Self-thinning is considered part of natural disturbances. See FW-TerrERU-AspMpl-DC-1, 2, and 3. As with other resources on the Forest, when a project or activity may impact aspen it will need to be designed or managed to ensure that the Forest is maintaining or moving towards these desired conditions.

Commenter: Gitlin, Alicyn

Comment:

Desired Condition 2 states The ecosystem diversity of Alpine Tundra is maintained. In addition, it maintains the ecological attributes and processes that provide habitat for native biota, panoramic vistas, and/or solitude. The mountain maintains attributes that provide historic and cultural values. Alpine Tundra displays a diverse composition of native species and vegetation communities (including boulder fields, talus slopes, and meadows). Invasive species are absent. (Draft Plan, p. 71) Yet, by allowing the use of reclaimed wastewater snow, the Forest Service is going against its own directive to “provide historic and cultural values” (Draft Plan, p. 71). It is also putting at risk the habitat of the Peaks Ragwort, which it says it seeks to maintain and protect from human caused impacts. The Forest Service should provide more direction for protecting the ragwort and also describe what it intends to do about the ragwort coming into contact with wastewater snow and the resulting extra nitrogen that may get into the soil and its possible effects on this threatened plant. Desired conditions are defined as the goals of what the Forest Service believes it should be moving towards. How does allowing the special use permit for Arizona Snowbowl move the alpine tundra or the adjacent Kachina Peaks Wilderness Area closer to the desired conditions? The Forest Service must explain in the Forest Plan how it will move toward all Desired Conditions for alpine tundra. The Draft Forest Plan does not mention extra nitrogen in the soil that can come from the use of reclaimed water. The use of reclaimed water in this sensitive area doesn’t fit into the Desired Conditions of “ecologically responsible forest activities” and where “Habitat conditions contribute to the survival and recovery of listed species” (Draft Plan Desired Conditions #1 and 2 for Wildlife, Fish, and Plants, p. 72- 73).

Response:

The Forest Plan does not authorize the use of reclaimed water for snowmaking or any other particular use. The Forest Plan establishes plan components that will guide decisions on projects and activities that are made after it is in effect. For example, the revised Forest Plan includes desired conditions for watersheds to be functioning properly and to exhibit high geomorphic, hydrologic, and biotic integrity within their inherent capability. See FW-Water-DC-1 and 2. A desired condition for the Alpine Tundra ERU seeks to maintain the attributes and processes that contribute to the ecological diversity and habitat for native biota in the ERU. See FW-TerrERU-AT-DC-1. New decisions on the use of reclaimed water for snowmaking will need to be consistent with these desired conditions and all of the other guidance in the Forest Plan. Past decisions are outside the scope of the plan. The effects of existing authorizations for snowmaking and use of reclaimed water on alpine tundra and the species and cultural values associated with alpine tundra were analyzed in the decision to authorize use of reclaimed water and snowmaking.

Commenter: Gitlin, Alicyn

Comment:

Grasslands contain one federally listed endangered species, the Black-footed ferret, eighteen Forest Service sensitive species, and sixteen other forest planning species. Grasslands are trending away from reference conditions, primarily due to fire suppression to protect adjacent development. Restoration of fire to these systems should be the primary way to restore their natural composition, structure, and function.

Response:

The desired conditions in the revised Plan for grasslands acknowledges that frequent surface fires are desirable in all grassland Ecological Response Units except for Verde Formation soils. See FW-TerrERU-Grass-DC-2. Because invasive annual species can influence the spread, intensity, or severity of uncharacteristic fire, and increase in response to fire, fire may not always be the most appropriate management tool. A desired condition for Fire Management promotes wildland fires burning within the historic fire regime of the vegetation communities affected. See FW-Fire-DC-2. The revised plan does not prohibit the use of wildfire managed for resource objectives in WUI like the current plan does and promotes the use of naturally ignited fires in fire adapted ERUs when burning conditions facilitate progress toward desired conditions. See FW-TerrERU-All G-2. A desired condition for All Terrestrial ERUs promote natural and human disturbances that provide desired overall plant density, species composition and structure and promotes the restoration of desired disturbance regimes (including fire) where practical. See FW-TerrERU-All-DC-2.

Commenter: Gitlin, Alicyn

Comment:

When tree removal is a priority, fire should be the preferred method of treatment

Response:

No change has been made in response to this comment. Decisions to treat, and how to treat, pinyon juniper are based on site specific analysis and made at the project level. Fire or fuelwooding may be effective treatments in some cases but perhaps not all. The Forest Plan provides the framework for projects to select the most effective treatment to move towards desired conditions. For example, pinyon seedling survival is promoted in a desired condition. See FW-TerrERU-DC-PJ-15. Management approaches in the Forest Products section (where fuelwood is addressed) remind forest managers to promote the use of forest products as a result of forest management activities and encourage use of forest products in lieu of onsite burning or chipping.

Commenter: Gitlin, Alicyn

Comment:

when mechanical measures are necessary, the Forest Service should encourage the removal of juniper for firewood, as part of a controlled cutting program. Juniper removal will improve habitat for pronghorn (pronghorn prefer areas with shrubs under 30 inches high) and increase grassland plant diversity. Cutting of juniper as firewood is not discussed as a vegetation treatment in DEIS Plan Volume 1, pp. 262-269. Mechanical treatment and fire are the only methods mentioned. However, firewood sales ARE recommended for pronghorn habitat improvement in DEIS Volume 1, Chapter 3, Alternative A, p.276. Please reiterate that policy when discussing grassland restoration. Because controlled burns are dependent on weather, resources, times of day and season of the year, only so much land can be treated by fire in a given year. Hand-removal methods may be needed in order to keep up with restoration goals. When this is necessary, encouraging firewood cutting should be the preferred method of removal.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan is programmatic in nature and does not make decisions on specific mechanical treatment techniques to be employed in specific situations. Decisions to treat, and how to treat, pinyon juniper will be based on site specific analysis and made at the project level. Prescribed fire or fuelwooding may be an effective treatment in some cases but not others. The Forest Plan provides the framework for projects to select the most effective treatment (mechanical, prescribed fire, or a combination of the two) to move towards desired conditions for the various ERUs. A management approach in the All Terrestrial ERU section reminds forest managers: Fire is essential for ecosystem function and for maintaining or moving towards desired conditions in ecosystems where fire is the primary natural disturbance. Primary natural disturbances in Desert Communities, Alpine Tundra, and riparian areas do not include fire, but rather include flooding, precipitation, temperature, wind, avalanches, and ultraviolet radiation. When used as a tool, fire can effectively restore forest structure when used alone or when combined with mechanical treatments. Mechanical treatments may be costly, so the capacity to implement such treatments across the landscape may be limited. Strategic placement and design of mechanical treatments increases their effectiveness in protecting values at risk. Another management approach for Forest Products (where fuelwood is addressed) reminds forest managers to promote the use of forest products as a result of forest management activities and encourages use of forest products in lieu of onsite burning or chipping.

Commenter: Gitlin, Alicyn

Comment:

Because an estimated 1,000 species are associated with piñon pines in the southwest (Whitham et al. 2003), and piñon pines hold cultural significance (i.e., pine nut gathering), piñon pines should not be cut. Slow-growing piñons are extremely drought sensitive, unlike their juniper counterparts. (Mueller et al. 2005, Breshears et al. 2009). Therefore, even though the two trees often coexist, their management should vary in order to maintain biodiversity. After the massive die-offs of piñon pine that have occurred over the last decade, we should not gratuitously remove them from the landscape. Please add guidelines to all PVNTs containing piñon pines saying that piñon pine will not be intentionally removed from the landscape when habitat restoration is a project goal.

Response:

No change has been made in response to this comment. Decisions to treat, and how to treat, pinyon juniper are based on site specific analysis and made at the project level. The Forest Plan provides the framework for projects to select the most effective treatment to move towards desired conditions for the various pinyon-juniper ERUs. Recognizing the importance of pinyon pines, one desired condition expressly promotes seedling survival for this species. See FW-TerrERU-DC-PJ-15.

Commenter: Gitlin, Alicyn

Comment:

Livestock grazing should be removed from areas where juniper encroachment is problematic.

Response:

Specific direction to remove livestock grazing from areas where juniper encroachment has not been added to the Forest Plan. However, this concern is still addressed by other Forest Plan components. A guideline in the Forest Plan requires livestock grazing to be managed to meet, or move towards, the desired conditions for forest resources such as soil, water, vegetation, and species. See FW-Graz-G-2. The Grassland Ecological Response Units section includes a desired condition that describes the desired plant composition in grasslands. See FW-TerrERU-Grass-DC-1. These plan components will guide decisions on livestock grazing in grasslands.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should consider the keystone species Gunnison's prairie dogs, as a management indicator species also (Draft Plan p. 41).

Response:

There is no requirement to select a management indicator species (MIS) for every ecological response unit (ERU). Rather MIS were selected for ERUs where management activities and restoration objectives are planned and change would be expected during the life of the plan: Ponderosa Pine (Gambel oak sub-type), Mixed Conifer with Aspen, and Mixed Conifer with Frequent Fire ERUs (Mexican spotted owl), Ponderosa Pine (old growth and snags) ERU (pygmy nuthatch), and grassland ERUs (pronghorn antelope). Threatened, endangered, and sensitive (TES) species have individual analyses in the environmental impact statement and the Biological Assessment and Biological Evaluation. Gunnison's prairie dogs are discussed in the Biological Assessment because they are a primary food item for black-footed ferrets as well as in the Final Environmental Impact Statement and the Species Viability Report. Application of the 17 MIS identified in the 1987 plan was found to be less than useful because some species are habitat generalists (e.g., elk use grasslands, woodlands, forests, riparian areas, etc.) so their populations are not closely tied to management in any one habitat or ERU. In addition, population changes of some 1987 plan MIS were too difficult to assess compared to influences (e.g., macroinvertebrates in watersheds that have more influencing factors than can be measured). Additional details on the review of the 17 MIS that are identified under the 1987 plan can be found in the Management Indicator Species Status Report for the Coconino National Forest (USDA Forest Service 2013) found in the plan set of documents. Also, in lieu of selecting for a whole variety of birds that can be influenced by management and a broad range of species associated with water on the Coconino NF, two "ecological indicators" or EIs were selected. Aspen is an ecological indicator of habitat diversity, and early seral stages in the following ERUs: Mixed Conifer with Aspen, Mixed Conifer with Frequent Fire, Spruce-Fir, and in localized areas in Ponderosa Pine. The Monitoring Plan has a question that reads: How much have management activities contributed to maintaining or moving towards desired conditions for aspen? Aquatic macroinvertebrates were selected as an ecological indicator of water quality. The Monitoring Plan has a question that reads: Have management activities contributed to impairment of warm water or cold water streams based on aquatic macroinvertebrate metrics?

Comment:

The Summary of Species Effects in DEIS v1 p. 280 tells us: “However, alternative B lacks guidance that alternative A has, such as more comprehensive guidance for grassland habitats where management emphasis is provided for pronghorn, addressing vegetation management, range management, land acquisition, off-road driving, road construction, and other activities in standards and guidelines. Within alternative A’s MA 27, objectives, standards, and guidelines are particularly strong for pronghorn in Semidesert Grassland, which is the grassland habitat in poorest condition. Alternative B’s desired conditions for the Anderson Mesa Management Area call for stable pronghorn populations, but because populations are currently stable, this does not emphasize improving trends. Objectives for grassland habitats indicate that little active habitat improvement or restoration will be done in those habitats. A small proportion of Great Basin Grasslands would be designated as wilderness, providing some extra protections.” (DEIS v1 p. 280) In 2004, the Coconino National Forest lost a lawsuit filed by the Arizona Wildlife Federation for not enforcing the previous Forest Plan rules and failing to protect pronghorn. (See press release at <http://www.azwildlife.org/ht/d/sp/a/GetDocumentAction/i/60627>). Now, 10 years later, the Forest Service is saying that pronghorn populations are stable, so it will decrease the level of protection that the Forest Plan will provide. (DEIS v1 p. 280). This is NOT acceptable. If applying the requirements set forth by the previous Forest Plan truly brought about stability in the pronghorn population, then the new Forest Plan should carry over the same requirements. Knowing that pronghorn populations have fluctuated over time, we don’t understand why the Forest Service would create a Forest Plan that would provide anything less than the strictest protection for pronghorn. Please add back the protective language from the last Forest Plan.

Response:

The Forest Plan has been modified in response to this comment. The current plan and the revised Forest Plan have similar plan components for antelope except in many cases, the direction has been expanded to forestwide in the revised Forest Plan. Both plans have pronghorn as a management indicator species for grassland. have guidelines to promote safe access to water and safe passage through fences. See FW-WFP-DC-5 and 6 and FW-ConstWat-DC-2. promote open structure in grasslands and an understory mix that provides food and cover for pronghorn except the direction in the revised Forest Plan applies forestwide instead of being limited to Management Area 27 in the current plan. See FW-TerrERU-Grass-DC-4 and 8. improve and expand pronghorn habitat except the revised Forest Plan has objectives for improving habitat forestwide instead one management area. See FW-TerrERU-Grass-O-1, 2, and 3. would design new road and new trail locations to meet species life history requirements, maintain access to adjoining habitat, maintain habitat for dispersal and migration. The revised Forest Plan direction is forestwide. See FW-WFP-G-6 and 13. Both plans would coordinate with Arizona Game and Fish Department on hunting recommendations except the management approach in the revised Forest Plan in the section on Wildlife, Fish, and Plants applies forestwide: Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity. The revised Forest Plan would promote antelope survival and successful reproduction through timing restrictions forestwide. It also has desired conditions for the Anderson Mesa Management Area that promote sustainable pronghorn populations that can move freely and easily access winter range. See FW-WFP-G-8; MA-AMesa-DC-1, 3.

Comment:

Some areas of the Coconino National Forest, particularly those located at higher elevations such as the San Francisco Peaks, remain little disturbed by human management and closely resemble conditions in which indigenous life evolved. Places retaining high degrees of ecological integrity generally host few if any roads. Those places function as reservoirs of biodiversity where passive restoration (i.e., halting or foregoing activities that may cause ecological damage) and active use of wildland fire for resource benefits may offer the most ecologically sensible management approaches over time.

Response:

The Forest Plan provides a comprehensive framework to guide future decisions on projects and activities on the Forest. The Forest Plan includes desired conditions for functioning and resilient resources based on a range of historic conditions. The Forest Plan includes other components that ensure that projects and activities are designed in a manner that maintains or moves the Forest toward these desired conditions and prevents ecological harm. In response to this comment, a definition for the term "restoration" has been added to the Glossary. It states that restoration is: The process of assisting in the recovery of an ecosystem that has been degraded, damaged, or destroyed (Society for Ecological Restoration International, 2004). Ecological restoration focuses on establishing or re-establishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions. The decision to restore an area and what techniques might be appropriate (e.g. active or passive restoration) would be made at the project level based on site specific conditions, not at the forest plan level. Site specific conditions would include current and desired vegetation conditions, fire or disturbance history, threats, and other resource values. The decision on whether wildland fire is the appropriate tool for use at a particular time and place is decided at the time of natural ignition. Wildland fire may be a tool in areas where mechanical treatments are not appropriate, such as in wilderness. Considerations in deciding whether wildland fire is an appropriate tool could include, but are not limited to, fuel loading, proximity of wildland urban interface, threats to life and property, fire regime, capacity to manage the fire, and weather. The Forest Plan provides desired conditions that will guide future management. A desired condition in the Fire section acknowledges the desire for wildland fires to burn within the historic fire regime of the vegetation communities affected. See FW-Fire-DC-2. If wildland fire is used as a restoration tool under the Forest Plan, it will need to meet or move towards the desired conditions in the Forest Plan. Wildland fire may not always be the appropriate tool to achieve restoration in every situation. In areas where fire has been removed from the landscape over a long period of time, introducing fire without some level of mechanical treatment could result in uncharacteristic fire behavior, which would not meet the desired conditions of other resources or programs on the Forest. See FW-Eco-DC-3 and FW-TerrERU-DC-DC-3.

Comment:

Inventoried Roadless Areas Five of the forest's existing Inventoried Roadless Areas (IRAs). These areas consist of: • Walker Mountain: 6,300 acres • Cimarron-Boulder; 15,590 • Hackberry Mountain: 26,223 • East Clear Creek: 2,033 • Barbershop Canyon: 1,310. Conservationists have provided timely, thoroughly documented wilderness suitability analysis consistent with Forest Service policy for these areas (AWC 2007, 2007a, 2007b, 2007c; and GCWC 2007; and GCWC and CBD 2007). We were especially dismayed that only Walker Mountain was proposed as potential wilderness for the proposed plan (Forest Service 2013a:18). Why would other areas, such as Hackberry and Barbershop, not be carried forward in the agencies proposed alternative (Alternative B) when those areas scored HIGHER in the Capability, Availability, and Need than Walker Mountain? After the substantial amount of work that our collective group invested in studying and advocating for these potential wilderness areas, we request to be provided with the rationale for the Alternative B results. We agree with the agency's finding that these areas met the criteria for Potential Wilderness designation (Forest Service 2013b:3).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismarck, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this

screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

The Draft Forest Plan also contains inadequate standards and guidelines for listed and sensitive species. The Current Forest Plan contains specific management standards and guidelines for the Mexican spotted owl, (Current Plan at replacement page 65-65-6), and northern goshawk, (Current Plan at 65-7-65-11). The Draft Forest Plan provides no standards and guidelines for the Mexican spotted owl, and provides only one guideline specifically for the northern goshawk. While the Forest Service dismisses Alternative A (the Current Forest Plan) in the DEIS analysis regarding Mexican spotted owl recovery because it “contains language from the original recovery plan, which has since been updated,” (DEIS at 456), the Forest Service provides no rationale for excluding updated standards and guidelines based on the current species’ recovery plan. Instead, the Forest Service suggests that recovery of the Mexican spotted owl and other species will occur due to the presence in the Draft Plan of “[d]esired conditions and other plan components for the primary vegetation types” used by listed species, (Draft Plan at 458), and because the Draft Forest Plan “by inference includes more current science,” (DEIS at 459). This is insufficient management guidance to provide for the recovery of listed species. Moreover, the Forest Service must identify the reasons for this change in management strategy. *Motor Vehicles Manufacturers Assoc. v. State Farm*, 463 U.S. 29, 57 (1983) (“[A]n agency changing its course must supply a reasoned analysis.”).

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

Recovery plans are not enforceable in site-specific project implementation, and merely referencing them in a revised forest plan does not insure species viability. The U.S. Fish and Wildlife Service (“FWS”) recognized the importance of plan-level standards and guidelines to limit discretion of forest managers in planning projects that may harm Mexican spotted owl. It stated on page 39 of its November 25, 1996 biological opinion (“jeopardy opinion”) on forest plan implementation that much discretion existed on the part of forest managers at the project level in the implementation of forest plan guidance and direction. The jeopardy opinion identified management “discretion” as a reason why older forest plans violated Section 9 of the Endangered Species Act (“ESA”), expressed concern for the “broad range of effects that could result from management direction of the existing forest plans,” and suggested that “management direction to prevent the development of forest project-level activities that are likely to adversely affect” MSO was needed to avoid jeopardy. As a result of this jeopardy opinion, Region 3 forest management plans were amended to include specific standards and guidelines for protection of Mexican spotted owl. The decision to remove specific standards and guidelines regarding the Mexican spotted owl and the northern goshawk highlight the Forest Service’s goal of achieving maximum discretion when making project-level decisions. This level of discretion fails to ensure the Forest Service will be able to meet the goals of recovery and delisting as set out in NFMA regulations and the ESA.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

Currently, native fish populations in the Coconino face many threats; 15 of the 16 native fish species that occur on the forest are federally listed or classified as sensitive by the Southwestern Region. (Draft Plan at 72). The Forest Service has attributed this decline in large part to the presence of non-native fish, which “eat, compete with and can hybridize with native fish.” (USDA 2009 at 4-121). Additionally, disease is a primary threat to native fish and non-native fish can transfer disease to native fish. (DEIS at 333). In fact, in its supplemental analysis of aquatic ecosystems within the Coconino, the Forest Service adopts the view that “[t]he primary causal factor for extinction of native fishes in the Southwest is directly related to the introduction of nonnative fish.” (USDA 2013 at 10). However, the Forest Service does not provide standards, guidelines, or management strategies within the Draft Forest Plan to decrease the presence of non-native fish within the Coconino or manage them in such a way to lead to the recovery of native species. Instead, the Forest Service appears to want to have it both ways, allowing for the continued presence of non-native fish, while attempting to improve the viability of native fish species. Additionally, the DEIS provides no analysis of the effects, whether direct or cumulative, of continuing to support non-native fish populations at current levels. Specifically, the Draft Forest Plan includes desired conditions that include supporting “sustainable populations of . . . desirable nonnative . . . animal species [through] healthy ecosystems and ecologically responsible forest activities,” while also desiring “[h]abitat conditions [that] contribute to the survival and recovery of listed species.” (Draft Plan at 72-73). There is no evidence presented in either the DEIS or supplemental reports to suggest that non-native fish species are desirable for any other purpose than providing recreational sport fishing opportunities, which also exist for native fish species. (See e.g. Draft Plan at 72, 73 (FW-WFP-DC-11)). In fact, the Forest Service seems to cede all authority over fish populations to the Arizona Game and Fish Department (“AGFD”), stating that “management of nonnative fish falls under the purview of [AGFD]” and the only way the Forest Service can influence the introduction of non-native animals is through “public education and work.” (DEIS at 333). We would like to remind the agency that the Property Clause of the United States Constitution gives Congress “complete power” over federal lands. *Kleppe v. New Mexico*, 426 U.S. 529, 535 (1976). Under the Property Clause, Congress may preempt traditional state trustee and police powers over wild animals, giving the federal government authority to regulate and protect wildlife on federal land. *Id.*; *Wyoming v. United States*, 279 F.3d 1214 (10th Cir. 2002); 43 C.F.R. § 24.3. The Forest Service should avoid blanket statements implying that the AGFD has sole responsibility for managing wildlife populations. The Forest Service clearly has an obligation regarding wildlife species, especially those listed as threatened or endangered, or considered sensitive by the regional office. The Forest Service also has an obligation to protect forest and watershed resiliency, and native species diversity, adversely impacted by artificially high populations of non-native fish species. Moreover, the Forest Service has repeatedly highlighted the fact that the Coconino “provides a unique opportunity to fish for native [species].” (Draft Plan at 72). There is no stated reason why nonnative fish species must continue to be stocked and maintained in the waters of the Coconino National Forest. The Forest Service must address this issue in its Final Forest Plan and Final EIS because it is nearly impossible to maintain or improve native fish viability in the continued presence of nonnative fish. (Clarkson et al. 2005). Additionally, climate change will likely exacerbate this problem in the future. (Rahel and Olden 2008).

Response:

The Forest Plan contains plan components designed to ensure that native species are protected. Three desired conditions address habitat for native species. See FW-WFP-DC-1, 2, and 3. Three more desired conditions specifically address native aquatic and fish species. See FW-WFP-DC-4, 9, and 10. Two guidelines include the use of species protection measures and objectives from approved recovery plans and complying with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. A guideline requires projects to be designed or managed to maintain or improve habitat for native species and reduce the threat of disease. See FW-WFP-G-3. Finally, several management approaches in the Wildlife, Fish, and Plants section provide suggestions related to native species. They remind forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current

agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing. Maintain the native-fish-only status of Fossil Creek and streams free of non-natives through public education, signs, and law enforcement. A desired condition in Invasive Species seeks for invasive species to be absent or existing at levels where they do not disrupt ecological composition, structure, and function; do not disrupt the natural fire regime; or do not affect the sustainability of native and desirable non-native species. See FW-Invas-DC-1. Invasives are defined in the glossary: Invasive species – Any species that is non-native (or alien) to the forest and whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health. Invasive species can be identified within any of the following four taxonomic categories: Plants, Vertebrates, Invertebrates, and Pathogens. There is a link to federal and state invasive plant species lists on the U.S. Department of Agriculture, Natural Resource Conservation Service website. The National Invasive Species Information Center provides information on invasive vertebrates, invertebrates, and microbes.

Commenter: Gitlin, Alicyn

Comment:

We recommend that the Forest Service incorporate the following guidelines into the Final Forest Plan in order to ensure native fish viability, as required under NFMA and the ESA.

- Where hunting and other wildlife-based recreation opportunities exist, they do not compromise native species populations or habitat.
- Only native species are used for fish stocking for sport fishing
- Non-native fish species are managed in locations and ways that do not pose any threat to native species (delete the final sentence from FW-WFP-DC-11)
- Non-native fish are separated from native fish populations with physical barriers where feasible.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

The identification of MIS in the DEIS is insufficient because it fails to identify MIS for most forest ecosystems within the Coconino National Forest. The Current Forest Plan incorporated MIS based on Management Area ("MA"), which covered 20 different habitats found throughout the forest. See Current Plan. Each MA had MIS that were specifically identified as being associated with the habitat present in the MA. Conversely, the DEIS uses only three MIS to compare the identified alternatives for the entire forest. Additionally, the Draft Forest Plan only incorporates the same three species as MIS, and only Alternative A (the Current Plan) would include more. (DEIS at 506). The Forest Service provides no rationale for this drastic reduction in the number of MIS for the Coconino. The Forest Plan needs to identify more than three MIS for the forest. The three species identified in the DEIS (Mexican spotted owl, pronghorn antelope, and pygmy nuthatch) would not provide an adequate picture of problems on the forest, particularly in rapidly changing systems and those facing the greatest threat from climate change. While the Draft Forest Plan provides MIS for grasslands, ponderosa pine, and mixed conifer ecosystems, it neglects to provide any species as MIS for riparian, aquatic, tundra, or wetland ecosystems. These areas are some of the more degraded and threatened within the Coconino. Indeed, in the DEIS, the Forest Service states that the "majority of threatened and endangered species on the forest are associated with perennial streams and riparian habitat." (DEIS at 224). This points to the need for more monitoring in these habitats, one aspect of which is the identification of MIS for aquatic and riparian ecosystems. Overall, the Draft Forest Plan's identification of MIS is incomplete and inadequate to ensure that ecosystems and species are monitored at a level that will allow the Forest Service to understand trends in population and viability of the majority of species in the Coconino. We support the use of the three species currently identified as MIS, but more species must be added for the MIS to be effective and meet NFMA guidelines.

Response:

There is no requirement to select a management indicator species (MIS) for every ecological response unit (ERU). Rather MIS were selected for ERUs where management activities and restoration objectives are planned and change would be expected during the life of the plan: Ponderosa Pine (Gambel oak sub-type), Mixed Conifer with Aspen, and Mixed Conifer with Frequent Fire ERUs (Mexican spotted owl), Ponderosa Pine (old growth and snags) ERU (pygmy nuthatch), and grassland ERUs (pronghorn antelope). Threatened, endangered, and sensitive (TES) species have individual analyses in the environmental impact statement and the Biological Assessment and Biological Evaluation. Gunnison's prairie dogs are discussed in the Biological Assessment because they are a primary food item for black-footed ferrets as well as in the Final Environmental Impact Statement and the Species Viability Report. Application of the 17 MIS identified in the 1987 plan was found to be less than useful because some species are habitat generalists (e.g., elk use grasslands, woodlands, forests, riparian areas, etc.) so their populations are not closely tied to management in any one habitat or ERU. In addition, population changes of some 1987 plan MIS were too difficult to assess compared to influences (e.g., macroinvertebrates in watersheds that have more influencing factors than can be measured). Additional details on the review of the 17 MIS that are identified under the 1987 plan can be found in the Management Indicator Species Status Report for the Coconino National Forest (USDA Forest Service 2013) found in the plan set of documents. Also, in lieu of selecting for a whole variety of birds that can be influenced by management and a broad range of species associated with water on the Coconino NF, two "ecological indicators" or EIs were selected. Aspen is an ecological indicator of habitat diversity, and early seral stages in the following ERUs: Mixed Conifer with Aspen, Mixed Conifer with Frequent Fire, Spruce-Fir, and in localized areas in Ponderosa Pine. The Monitoring Plan has a question that reads: How much have management activities contributed to maintaining or moving towards desired conditions for aspen? Aquatic macroinvertebrates were selected as an ecological indicator of water quality. The Monitoring Plan has a question that reads: Have management activities contributed to impairment of warm water or cold water streams based on aquatic macroinvertebrate metrics?

Comment:

In addition to identifying additional and diverse MIS, the Forest Service should also include management guidelines that call for a survey for suites of species and perform community analyses to detect trends in ecosystems. Modern statistical techniques are capable of evaluating ecosystem health and changes with a high level of sensitivity. For example, community analyses of aquatic or terrestrial macroarthropods, native fish species, or common plants can be used to detect changes in ecosystem condition. (Bain et al. 2000, Bakker 2008, Riggins et al. 2009). This ecosystem-level analysis will allow for better management, planning, and viability estimates in the future.

Response:

Surveying suites of species is one way to identify trends in ecosystems. The Monitoring Strategy and Plan included in Chapter 5 of the Forest Plan was developed to address the Forest's obligation to conduct monitoring under the 1982 Planning Rule provisions while considering Forest staffing and budget levels over the life of the Forest Plan. Whenever possible and appropriate, the Forest has sought to use existing data collection efforts to answer the monitoring questions which is intended to reduce the cost (both in dollars and in personnel) for monitoring. This existing data is used to answer monitoring questions that can also identify trends in ecosystems rather than creating a new surveying requirement that is not within the foreseeable budget for the Forest. For example, the Monitoring Plan uses the Forest Activity Tracking System (FACTS) database to identify the acres treated in each Ecological Response Unit to determine if management activities have contributed to maintaining or making progress toward DCs related to vegetation structure for the Semi-desert Grassland and Pinyon Juniper with Grass ERUs. See Monitoring Question #3 in Table 15 in the Forest Plan.

Comment:

There are serious concerns amongst climate and forest scientists that in the coming decades the southwestern United States will experience a significant increase in temperatures, an increase in the frequency and severity of droughts, and an altered precipitation pattern to include shorter winters (less precipitation falling as snow, earlier spring runoff) and more frequent and severe flooding events. Such concerns are overlooked in the Draft Forest Plan under the pretense that climate change is too nebulous or complex for the Forest Service to address it directly. Climate change is also likely to exacerbate the (already hazardous) fire hazard in the region. Prior to western settlement the fire regime of ponderosa pine-dominated forests consisted primarily of frequent, low-intensity surface fires. More than a century of fire exclusion, livestock grazing, and harvesting of old growth ponderosa pine (high grading) has drastically altered this fire regime. Much of the Coconino National Forest is now overly dense and is therefore primed for catastrophic, stand-replacing fire events. Changing climate further adds to this risk, yet there is no attempt in the Draft Forest Plan to incorporate climate mitigation measures (i.e. reducing greenhouse emissions); furthermore, there is not a coherent, forest-wide climate adaptation strategy outlined in this Draft.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in

management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes can be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Comment:

Overall, this plan lacks confirmable management objectives linked to monitoring metrics. More simply; there is too much jargon and not enough repeatable data. There is not a sense of urgency in plan implementation that climate change and extreme wildfires from decades of unaware management leadership has created unsustainable forest conditions. The Forest Service can do more to limit the future impacts of climate change in our region. Protecting forest resiliency, retaining instream water rights, allowing wildlife species migration, and restoring the prehistoric fire regime will all help, as will limiting other stressors on native species. However, we don't know if we are moving in the right direction without quantifiable monitoring metrics.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in

the plan? Have there been unanticipated changes in conditions? Can changes can be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Commenter: Gitlin, Alicyn

Comment:

We could not find anything in this Plan on forest closure criteria or changes in campfire regulation. When the Forest Service must close forests or ban campfires as an emergency measure, it becomes an expensive proposition (for taxpayers) about which it is hard to educate and inform, and even more difficult to enforce. Instead, during this Forest Plan revision process, the Forest Service has a chance to create a simple policy that will be easy to understand, easy to teach and enforce, and save taxpayer dollars. It will be cheaper and safer to enforce a policy of banning campfires automatically during certain dates than it is to fight out of control fires during our driest season; it will be cheaper and safer than evacuating the forest and nearby residences.

Response:

The Forest has an existing policy and process to address when to close the forest and ban campfires based on specific existing conditions. Although the Forest Plan does not repeat this policy nor does it provide a specific seasonal closure for campfires, it does contain a guideline requiring recreational activities to be managed to promote public health and safety. See FW-Rec-All-G-2. The existing policy and process are consistent with this guideline and can be viewed as an extension of this guideline.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should also consider extending road closures through the dry season without closing the forest. For example, this year the Forest Service could keep the winter road closure in effect until the monsoons begin and stop campfires today. The new weather the region has and with May/June humidity's <10% dictate new management criteria needs to be used, but none is mentioned. It's time to seriously consider these ideas

Response:

No change has been made to the Forest Plan in response to this comment. Specific road closures are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. Forest has an existing policy and process to address when to close the forest and ban campfires based on specific existing conditions. Although the Plan does not provide a specific seasonal closure for campfires, it does contain a guideline requiring recreational activities to be managed to promote public health and safety. See FW-Rec-All-G-2. The existing policy and process are consistent with this guideline and can be viewed as an extension of this guideline.

Draft

Comment:

One of the primary water quality problems identified in the Coconino is the presence of E. coli within Oak Creek and the Upper Verde River watershed. According to the DEIS, this accounts for 33 miles (15 percent) of streams that are classified as Class 5 (impaired). (DEIS at 5). However, the Draft Forest Plan provides no desired conditions, objectives, standards, or guidelines that address or attempt to respond to this problem. The primary cause of this activity is septic system leaks and recreational swimming. This human caused pollution should therefore be a relatively easy target for the Forest Service to try to minimize and prevent. To address this issue, we recommend incorporating the following standards or guidelines for water quality into the Final Forest Plan:

- Monitor water quality during periods of high recreational use to determine if State water quality standards for primary contact recreation are being violated.
- Restrict access and human use in areas where water quality is failing to meet State water quality standards until such time as water quality has been restored.

Response:

Arizona Department of Water Resources is responsible for monitoring water quality. Local county health departments are responsible for advisories restricting designated uses such as swimming. Two Management Approaches were added to the Watersheds and Water section, which state: Collaborate with volunteers, other agencies, private landowners, and other stakeholders on education, interpretation, and monitoring relating to water quality, public health, and fish and wildlife habitat especially in regards to threats to water quality from leaking septic tank systems; threats to water supply and water quality from wildfires; threats to downstream resources from the use of fertilizers; and threats to health and resources from improper disposal of diapers and other garbage or when state water quality standards have been exceeded. Provide input and recommend strategies for implementation plans as required by Arizona Revised Statute 49-234 for existing TMDLs to provide strategies to reduce existing pollutant loads identified in TMDLs and to be in compliance with applicable water quality standards for impaired waters. Restricting access and human use is an action that could be taken if water quality is not in desired condition. A decision to implement these type of restrictions would be based on site-specific information and analysis. The forest plan has several plan components relating to water quality including meeting, or exceeding Arizona water quality standards, improving water quality, and implementing approved total maximum daily load recommendations for impaired or non-attaining waters. See FW-Water-DC-7, FW-Water-G-5, FW-Rip-All-DC-3 and 4. A guideline in the Oak Creek Management Area would require recreation management to maintain water quality. See MA-OakCrk-G-9. Finally, an item in the Monitoring Plan would track forest changes to Arizona Department of Environmental Quality impaired or non-attaining list.

Commenter: Gitlin, Alicyn

Comment:

Regarding FW-Soil-DC #4: Biological soil crusts are present with limited soil disturbance (<1/3 of area impacted) and functioning on coarse textured and sandy soils. Biological soil crusts anchor soils, protecting them from erosion, while contributing to plant health and nutrient cycling. They are extremely hard to restore once destroyed. Desired Condition #4 says that it's fine to impact a third of soil crusts. There is no scientific justification for allowing this level of destruction. The Forest Service must do more to protect soil crusts. We recommend this be changed this to a scientifically justifiable level of coverage, and that you supply citations for how you arrived at your decision.

Response:

The desired condition that addresses biological soil crusts has been adjusted in response to comments. See FW-Soils-DC-4. The reference to a third of the area impacted was removed because it was confusing and not supported by scientific literature. The desired condition now contains an expression of what biological soil crusts should do, not levels of disturbance. Potential impacts to soil resources, including biological soil crusts, will be considered at the project level based on the soil resources that are present in the project area and the activities that are being considered.

Commenter: Gitlin, Alicyn

Comment:

In the third stated guideline for Water Quality within the Draft Forest Plan, the Forest Service states that “[b]est management practices for ground disturbing activities in and outside of streamside management zones should be identified, implemented, and monitored to maintain water quality” (Draft Plan at 20, emphasis added). “Ground disturbing activities” as defined in the Draft Forest Plan, to which that phrase in the previous sentence is linked, covers only “[a]n activity which moves soil to the extent where an archeological site may be impacted.” (DEIS at 196). This definition is too narrow to fully encompass the numerous activities that may disturb soil. The Forest Service needs to provide a broader definition for these activities. We recommend incorporating the following definition for “ground disturbing activities” into the plan: “an activity that has the potential to cause disruption to soil placement or quantity.”

Response:

The guideline has been adjusted to address your concern that, as defined, the term "ground disturbing activities" is too narrow and would not protect water quality. The guideline has been rewritten to incorporate your suggestions. See FW-Water-G-4. In addition, the term "ground disturbing" has been removed from the glossary. The definition was too narrowly focused on impacts to archaeological sites and did not fully encompass other actions that could impair water quality or impact other resources.

Comment:

Second, this is troubling because the current state of riparian ecosystems on the Coconino is impaired and degraded, and if the Draft Forest Plan will result in the same state as is currently found under management from the Current Forest Plan (Alternative A), there is little hope that fish and wildlife species will be able to recover.

Response:

The Forest Plan has numerous desired conditions that relate to the ecological integrity and function of riparian areas, stream banks, flow regimes, and other features of aquatic habitat. See FW-Eco-DC-3; FW-Water-DC-1-7, FW-Rip-All-DC-1-5; FW-Rip-Strm-DC-1-4; FW-Rip-WtInds-DC-1, 2; FW-Rip-Spr-DC-1-5; FW-Rip-RipType-DC-1-6; FW-WFP-DC-4, 5, 6. Guidelines that specifically apply to functioning aquatic and riparian ecosystems include: FW-Water-G-1-6; FW-Rip-All-G-2; FW-Rip-Strm-G-1; FW-Rip-Spr-G-1-4, FW-Rip-RipType-G-1, FW-WFP-G-3, and FW-RdsFac-G-5 and 9. In addition there are objectives in the plan to restore wetlands, springs, non functioning and function-at-risk riparian areas, and stream habitat. See FW-Rip-WtInds-O-1; FW-Rip-Spr-O-1, FW-Rip-All-O-1, and FW-WFP-O-4. In regards to areas near the edge of perennial water, an aquatic management zone is required to protect water quality and to avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits that would seriously and adversely affect water conditions, fish habitat, or connected downstream cave, karst, and lava tube resources. As a general starting point, the zone width in riparian areas ranges from 100 to 150 feet on each side of the streamcourse or riparian area depending on erosion hazard (See FW-RipAll-G-3). A management approach for All Riparian Areas recommends project level analysis to determine whether the zone should be wider or narrower. It reads: Consider Table 1 as a general starting point for determining the width of the aquatic management zone relative to erosion hazard. Aquatic management zones may be wider or narrow than suggested in Table 1 and would be decided at the project level. Considerations for the size and shape of an aquatic management zone include amount and type of material on the ground, width and slope of the zone, soil type or hydrologic soil group, orientation of stream or river to the sun, connection of stream to impaired or non-attaining waters, presence of threatened or endangered species, condition of the riparian area, adjacent land use, and threat of contamination from pollutants or chemicals. Significant topographic changes, such as abrupt canyon edges may be used as boundaries for aquatic management zones, as long as activities beyond the canyon walls do not negatively influence the functioning of the aquatic management zone. Because non-riparian streamcourses could also negatively affect perennial waters, an aquatic management zone is also required for non-riparian, intermittent streamcourses to reduce sedimentation, maintain functioning of the channel within its floodplain, and maintain downstream water quality and riparian habitat and function. This management zone would also avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits that would seriously and adversely affect water conditions, fish habitat, or connected downstream cave, karst, and lava tube resources. See FW-Rip-Strm-G-2. Stream Ecosystems has a management approach similar to the one in All Riparian Areas but in addition, it mentions consideration of ephemeral streamcourses that might influence downstream water quality. In addition, a site-specific aquatic management zone would be required for new projects and management activities around reservoirs to protect water quality and to avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits that would seriously and adversely affect water conditions or aquatic habitat. See FW-ConstWat-G-1. Also, desired conditions in Wildlife, Fish and Plants support properly functioning ecosystems which in turn support sustainable populations of native plant and animal species distributed throughout their potential natural range, and the recovery of listed species, and these conditions maintain species diversity and metapopulations. See FW-WFP-DC-1 and 2.

Commenter: Gitlin, Alicyn

Comment:

Finally, if the Final Forest Plan includes only the desired conditions, objectives, standards, and guidelines presented in the Draft Forest Plan for grazing, off-road vehicle use, and road maintenance, which are inadequate to address historical and continuing use and misuse, it is more than likely that riparian areas will become more degraded, not less, over the time this plan is implemented.[...] The current condition of riparian areas in the Coconino highlights the problems with past management and the need for increased protection for these areas within the Final Forest Plan. Twenty-three percent of riparian areas are “functioning at-risk” and six percent are “nonfunctional.” (DEIS at 67). In its discussion of the Affected Environment for Riparian Forests, the DEIS states that “legacy of improperly located and poorly maintained roads (especially user-created roads)”, “dispersed recreation”, “legacy off-highway vehicle use”, and “legacy grazing” are the threats faced by every impaired or at-risk watershed within the Coconino. (DEIS at 68). However, none of these threats is adequately addressed or mitigated within the Draft Forest Plan.

Response:

Riparian areas are protected by Plan direction. The Plan does not apply an all-purpose buffer or restriction on particular activities. Rather, Plan direction ensures that impacts to riparian areas, despite their exact proximity to a riparian area or the cause of the impact, are addressed in project-level decisions. See FW-Rip-All-G-1, 2, 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Sprg-G-1, 3, and 4, and FW-Graz-G-4,5, and 7.

Commenter: Gitlin, Alicyn

Comment:

In the Draft Forest Plan, the following is stated as a desired condition for Roads and Facilities within the forest: “Temporary roads that support ecosystem restoration activities, fuels management, or other short- term projects are rehabilitated promptly after project completion. Unneeded roads are closed or naturalized to reduce human disturbance to wildlife and to reduce soil erosion. Some closed roads are converted to motorized trails or nonmotorized trails for recreational use.” (Draft Plan at 91-92). We recommend changing the final sentence of this desired condition to “Some closed roads are converted to nonmotorized trails for recreational use when such use conforms to habitat and species recovery plans, will not result in degradation of natural resources, and replaces other planned new trail development within the forest.” Moreover, all of these conditions should be changed to be standards or guidelines, as their language and prescriptions are better suited for project-level guidance as opposed to general goals.

Response:

The Forest Plan has been adjusted in response to this comment. The portion of this component that addressed converting closed roads to trails has been converted into a guideline in the Trails section. See FW-Rec-Trails-G-5. The guideline incorporates the suggestion to consider impacts to other resources when considering whether to convert a closed road to a trail. The guideline does not require the trail to be nonmotorized. That decision would be made at the project level based on site-specific information.

Commenter: Gitlin, Alicyn

Comment:

Sediment pollution is also currently a problem in many of the streams within the Coconino. According to the DEIS, the most important source of non-point pollution in the forest is “sediment generated from roads near drainages.” (DEIS at 56). The Forest Service goes on to mention only one management strategy imposed to deal with this problem, which is “implementation of BMPs for all projects that have the potential to increase nonpoint pollution.” Id. All other strategies cited deal with controlling point source pollution. Id. The management strategy of BMP implementation should be a mandatory standard, and apply not just to new infrastructure, but to existing infrastructure and legacy roads, which often have the biggest impact on water quality.

Response:

The Plan contains many components that address sediment that may be associated with the management of roads and infrastructure. See FW-Rip-All-DC-1, FW-Rip-All-G-2, FW-Rip-Strm-DC-3, FW-Rip-Strm-G-2, and FW-RdsFac-G-2. In addition, Chapter 4 of the plan, under Recreation and Transportation Suitability, clarifies that the decisions associated with the Travel Management Rule, and subsequent updates, designate roads, trails, and areas suitable for motorized vehicle use. The analyses associated with the Travel Management Rule would also address issues associated with legacy roads and sedimentation into drainages.

Commenter: Gitlin, Alicyn

Comment:

Surveys should be done as part of the minimum road system analysis that assess these on-going impacts and determine the continued utility of roads. This process will inform future maintenance and decommissioning needs in order to address water quality concerns.

Response:

The Forest Plan has not been adjusted to require surveys be conducted as part of a minimum road system analysis. The Forest Plan provides the framework for road system analyses. The Roads and Facilities section includes a desired condition for the transportation system to expand and contract commensurate with use and needs, and to balance the desire for access with management activities and ecological impacts. See FW-RdsFac-DC-1. As travel management analyses are conducted on the Forest, this desired condition will require consideration of how to address routes that are causing ecological and social impacts. This desired condition will also guide decisions on the construction, reconstruction, or closure of roads that are causing ecological and social impacts. The level of surveying that is necessary will be determined at the project level based on the scope of the project.

Commenter: Gitlin, Alicyn

Comment:

The following is listed as a guideline for Roads and Facilities in the Draft Forest Plan: “Stream crossings on permanent roads should be designed to provide the most cost efficient drainage structure consistent with resource protection, including safe passage of native aquatic organisms, and consider infrastructure needs and legal obligations.” (Draft Plan at 93). This guideline is not sufficient to tackle the ongoing problem of sediment pollution from roads. The guideline should be changed to read: “Stream crossing on permanent roads shall be designed to provide the most effective drainage structure designed to ensure resource protection, safe passage of native aquatic organisms, and prevention of pollution and sedimentation of streams.”

Response:

This guideline has been adjusted to address in response to your suggestions. Resource protection associated with stream crossings is now strategically addressed in FW-RdsFac-DC-1, FW-RdsFac-G-1, 2, 5, and 9. Whether a drainage structure is "cost efficient" is a site-specific determination.

Commenter: Gitlin, Alicyn

Comment:

One threat that is common to all riparian areas on the forest, according to the Forest Service, is dispersed recreation. (DEIS at 67). “Dispersed recreation has the potential to disturb riparian vegetation and bank stability.” Id. As a result, there is increased soil erosion and sedimentation of streams, both of which damage aquatic species habitat and impair water quality. Id. Due to limited enforcement and misuse, the negative impact on water resources from off-road vehicle (“ORV”) use in riparian areas has contributed to increased sedimentation into streams within the Coconino. In order to combat the negative effects of off-road vehicle use on water quality, the Forest Service should close and decommission any ORV trails that cross streams or are near riparian areas where damage to riparian or aquatic ecosystems is occurring or where off-trail use into streambeds, streambanks, or running water is occurring.

Response:

The Forest is not making site-specific decisions, such as the closure or decommissioning of specific trails, in the Forest Plan. Appropriate routes for ORV use have been and continue to be addressed through the Travel Management Rule (TMR) process, which makes decisions on road and trail use based on site specific information. Since the implementation of the TMR on the Forest, cross country motorized travel has been generally prohibited. The Forest Plan contains direction that will guide future decisions related to the concern expressed in this comment. A comprehensive set of desired conditions and other plan components are included in the Riparian Areas section of the Forest Plan. See the FW-Rip-All, FW-Rip-Strm, FW-Rip-Wtlns, FW-Rip-Spr, and FW-Rip-RipType sections in Chapter 2 of the Forest Plan. Plan components in the Recreation section require consideration of the desired conditions for other resources, including riparian and aquatic ecosystems, and provide other guidance designed to protect resources from potential impacts from motorized recreation. See FW-Rec-All-DC-6, FW-Rec-All-G-1 and 2, FW-Rec-Disp-DC-2 and 3, FW-Rec-Disp-S-1, and FW-Rec-Disp-G-1.

Commenter: Gitlin, Alicyn

Comment:

We also recommend incorporating the following standards and guidelines from the Current Forest Plan, see replacement page 159, as modified, into the standards and guidelines for forest-wide dispersed recreation management within the Draft Forest Plan.(Draft Plan at 106-108 (FW- Rec-Disp-S, FW-Rec-Disp-G)): • Closely monitor off-road driving. If damage is occurring or becomes imminent, close affected trails or areas to off-road vehicle use. • Focus media attention on off-road driving damage in these sensitive areas at least annually.

Response:

The suggested language from the 1987 Forest Plan is no longer necessary because off road driving is now generally only allowed in the Cinder Hills OHV area. The suggested language addressed concerns that existed prior to implementation of the Travel Management Rule when cross country travel by motorized vehicles was allowed. Nonetheless, the Plan is not silent on off-road driving. A standard in the Roads and Facilities and Dispersed Recreation sections prohibit motor vehicle use beyond the designated system of roads, trails and areas, with limited exceptions. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1. Other plan components also address motorized recreation. See FW-Rec-DC-2, FW-Rec-G-1, and FW-Rec-Disp-Management Approaches, which state: Establish long-term partnerships with recreation organizations to help plan, construct, and maintain motorized and non-motorized recreation opportunities and foster a low impact conservation ethic. Develop management plans and/or strategies through collaborative efforts for specific dispersed recreation activities and/or locations to addresses user needs, visitor safety, and resource protection. Activities or locations could include motorized recreation for Cinder Hills OHV Area, rock climbing at the Oak Creek Vista, and mountain biking around Sedona. Coordinate with city, county, state, and other agencies to manage motorized recreation and reduce cross-boundary conflicts. The Plan contains many components that are designed to educate users of the forest about the resources on the Forest and the ethical use of those resources. These components have been combined into the Interpretation and Education section. These plan components provide direction to inform forest users about sustainable uses and practices on the Forest.

Comment:

Arid lands in the Southwest are particularly susceptible to damage from livestock grazing. (Agouridis et al. 2005). Grazing destroys vegetation, displaces soil, and consumes enormous quantities of water to the detriment of native species and the ecosystems on which they depend. (Belsky et al. 1999; Belsky and Blumenthal 1997). Moreover, climate change and drought are exacerbating these impacts and if grazing remains at current levels, are anticipated to lead to increasing soil erosion, dust generation, water pollution. (Beschta et al. 2013). The Forest Service has repeatedly identified livestock grazing as a source of water quality degradation and a stressor for aquatic ecosystems. Even with the addition of grazing-specific standards and guidelines in the Current Forest Plan, the Forest Service provides no data or analysis to suggest that these have resulted in an improvement in riparian or aquatic ecosystem function within the Coconino. Conversely, the only decision related to grazing that seems to have had a beneficial impact was the removal of lands along Verde River from grazing permitting that “resulted in improved riparian conditions along the river during the last 10 years.” (DEIS at 77). Due to the projected decrease in the number of livestock in counties surrounding the Coconino, (USDA 2009 at 14), and the fact that riparian areas account for only one percent of forest lands, it is reasonable for the Forest Service to consider and implement additional management strategies for livestock grazing within the Forest Plan that would decrease the negative effects of this permitted activity on water resources. The Forest Service notes that due to water rights held for livestock grazing, it is “not feasible to preclude this activity from all wetlands.” (DEIS at 281). However, allowing for a case-by-case exemption due to state issued water rights, the Forest Service can restrict livestock grazing to areas outside of wetlands and riparian areas. We recommend incorporating the following standard creating buffer zones into the Forest Plan sections addressing Livestock Grazing, (Draft Plan at 79-80): • Livestock grazing shall not be permitted within a quarter of a mile from riparian areas, wetlands, or seasonally present water, except as necessary to allow for continued use of state-issued water rights as allowed under Arizona State law. The benefits of riparian buffers in grazing management are numerous and include: “stabilization of streambanks, the filtering of runoff, the reduction of peak floods, and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife.” (Agouridis et al. 2005: 598).

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Commenter: Gitlin, Alicyn

Comment:

Additionally, the current monitoring plan proposed for the Coconino is not sufficient to accurately track and monitor the impacts of grazing on riparian and aquatic ecosystems. Therefore, we recommend the Forest Service incorporate a modified version of the monitoring guidelines for livestock grazing included in the Current Forest Plan, New Page 66-1, into either the forest-wide monitoring strategy. These guidelines should require identification of key forage monitoring areas both inside and outside of riparian areas and wetlands, identification of key monitoring species to assess grazing impacts on riparian and aquatic ecosystems, and a timeline for analysis of impacts both during and after permitted grazing periods.

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Commenter: Gitlin, Alicyn

Comment:

The most troubling component of the Forest Service's analysis of the impact of management decision on water resources within the Coconino National Forest is the statement that "the amount of human and livestock disturbances in riparian areas would be similar among all alternatives and would probably equally impact riparian function." (DEIS at 61). First, this points to the inadequacy of the alternatives analysis, which requires development of alternatives that "[r]igorously explore and objectively evaluate all reasonable alternatives." 40 CFR § 1502.14.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Comment:

The Forest Service should create objectives for the alpine tundra habitat type. After all, it supports one Federally listed threatened, three Forest Service sensitive species, and ten other Forest planning species, as well as “one percent of the plants known to be used by tribes that traditionally use the forest” (DEIS v2 pp. 485-6, Draft Plan p. 71).

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions such as particular actions to address potential threats to a species or habitat type. Decisions to take particular actions to address potential threats to a species or habitat type are determined during project-level planning, which would include recreation special use permits such as Snowbowl. No objectives have been added for the Alpine Tundra ecological response unit. However, the Forest Plan does contain direction that encourages maintenance, protection, and improvement of alpine tundra. Desired conditions for the Alpine Tundra ERU support and sustain rare or narrowly endemic species and provide habitat for San Francisco Peaks ragwort, a federally listed species and other native biota. See FW-TerrERU-AT-DC-1 and 2. If this desired condition is not being met, an objective is not necessary for the Forest to consider a project to address the problem. Plan language includes guidelines in Alpine Tundra and standards and guidelines under Designated Wilderness specific to the Kachina Peaks Wilderness (which contains alpine tundra) that protect and maintain this sensitive resource. See FW-TerrERU-AT-G-1. An objective for Designated Wilderness Areas would rehabilitate wilderness sites that have been impacted by recreation. See SA-Wild-O-1. Desired conditions in Designated Wilderness emphasize education, interpretation and wilderness resources, as do several guidelines. See SA-Wild-DC- 2, 3, 9, 10, and 11. Plan standards in the Kachina Peaks Wilderness further protect alpine tundra by only allowing recreational activities off trail when there is sufficient snowpack; by prohibiting overnight camping and recreational livestock; and by avoiding important habitat for the San Francisco Peaks ragwort when constructing new routes. See SA-Wild-S-3, 4, and 5. In addition, desired conditions in Recreation and in Special Uses promote recreation opportunities balanced with the capacity of forest resources to support them, minimal user and resource conflicts, and compatibility with resource protection. See FW-SpecUse-DC-7 and FW-Rec-All-DC-6. Other plan components protect alpine tundra by not allowing horse and pack stock on Humphrey's Trail and Weatherford Trail above Doyle Saddle, and not permitting recreational livestock in the watersheds draining into the Inner Basin Management Area. See MA-Peaks-S-1 and 3 and MA-InBsn-S-1.

Commenter: Gitlin, Alicyn

Comment:

Wetlands should be monitored for duck and other wildlife use.

Response:

The purpose of the monitoring plan is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the Forest Plan. A desired condition for wetlands in the Forest Plan is to provide functional soil and water resources on most acres, consistent with their flood regime and flood potential and provide diverse habitats for native species. Wetlands are in or trending toward proper functioning condition. See FW-Rip-WtInds-DC-1. An objective for wetlands would restore 5 to 10 wetlands currently not in proper functioning condition so that they are in, or are trending toward, proper functioning condition during each 10 year period over the life of the plan. See FW-Rip-WtInds-O-1. The Monitoring Plan asks on an annual basis: How much have management activities improved functional-at-risk or nonfunctional stream riparian areas and wetlands? This question is intended to gauge progress towards desired conditions and to address any problems moving towards desired conditions. The plan addresses wildlife use of wetlands by using the approach that if habitat is well distributed, and functioning properly (assuming sufficient precipitation), then wildlife will use the habitat where and when it needs to. Habitat that is functioning properly is the focus of the Forest Plan.

Comment:

On p. 122 of the Draft Plan, MA-FtVElden-DC, the following Desired Condition for Dispersed Recreation is given: The trail system is stable and does not increase significantly in mileage. We support this statement to protect the resources of this Management Area. Over the past decade, the system has increased significantly due to illegal trail building. The Forest Service now plans to greatly expand trail system mileage, extending trail access to areas previously uncrossed by trails such as Dry Lake Hills and the south side of Mount Elden, without demonstrating an ability to protect natural resources or curtail illegal trail building. The Forest Service should not proceed with adding trail mileage until they first create protective Desired Conditions for the Fort Valley/Mount Elden Management Area through this Plan revision process. Please follow your stated purpose for this Plan to promote responsible land management for the Coconino, and fulfill your responsibility for the stewardship of the forest to best meet the needs of the American people.

Response:

The Forest Plan has been adjusted in response to this comment. A large desired condition in the forestwide Dispersed Recreation sections has been divided into several plan components. Part of that plan component was converted in a desired condition for the All Recreation section. See FW-Rec-All-DC-6. This desired condition states: Recreation opportunities are balanced with the capacity of forest resources to support them and user conflicts are minimized. As development and population in the region continue to grow and new forms of recreation emerge, recreation settings on the Coconino NF are stable, retaining their natural character. Short-term increases in recreation during holidays and weekends do not result long-term adverse effects to other forest resources. Desired conditions in Trails and Trailheads promote a variety of trail types, challenge levels for diverse users in a variety of settings; the level of development at trails is appropriate for the site, use, ROS setting, and is sustainable; and damage to resources from visitor use at trails and trailheads is within the ability of forest to mitigate. See FW-Trails-DC-2, 3, 4. In addition, a desired condition in the Trails and Trailheads section states that trail use remains on the established trail surface, especially in high traffic or sensitive areas and unplanned user-created trails are rare. See FW-Trails-DC-11. Several guidelines are included in the Forest Plan to help ensure that decisions on recreation opportunities meet or move toward this desired condition. See FW-Rec-All-G-1 and 2. In addition, a guideline in Trails and Trailheads would require that unplanned, user-created trails be rehabilitated and managed to prevent future access. See FW-Trails-G-3. The Mount Elden Management Area also contains a desired condition on this topic. That desired condition seeks a trail system that is designed to be sustainable while balancing user experiences and impacts. See FW-MtElden-DC-1.

Comment:

Add a Standard to designate Mt. Elden and Dry Lake Hills areas as non-motorized areas from their gates and beyond. Add the following Management Approach for the Mount Elden and Dry Lake Hills Management Area: Close the gates on both Mt. Elden and Shultz Pass Roads at the bottom of the roads (e.g. at the current existing gates). Mt. Elden (and Shultz Pass – see below) are currently being abused and dominated by motorized vehicles repeatedly shuttling “gravity riders” (e.g. 10 - 15 round trips in a few hours) and their heavy downhill bicycles to the top of Mt. Elden trailheads. Gravity Rider shuttles are an improper and unsafe use of Mt. Elden Rd that negatively impacts all other recreationists using Mt. Elden Rd. Gravity Riders also are causing unsafe and negative interactions on all the trails (illegal and legal) as they blast down at unsafe speeds and with no concern for any other trail users. These gate closures will preserve these mentioned areas while allowing for sustainable and diverse uses of the Coconino forest in the best interest of the majority of the recreationists instead of a select group of motorized users who abuse these roads and disturb all other recreationists by using Mt. Elden and Shultz Pass roads as repeated motorized shuttle routes to repeatedly access trails, of which a number are illegal, at the top of Mt. Elden or the top of Shultz Pass. These gate closures are critical to preserving the diverse resources and rare mountain environments immediately adjacent to Flagstaff. As stated in the Draft Plan numerous times (e.g. see Chap 1 of Draft Plan) - this forest is subject to significant impacts from climate change, increasing population growth, increasing recreational demand, increasing recreational conflicts, new types of recreation demands, and increasing pressure on forest resources. Please follow your stated purpose for this Plan to promote responsible land management for the Coconino and fulfill your responsibility for the stewardship of the forest to best meet the needs of the American people. Mt. Elden’s motorized access needs to STOP at the existing gate at the bottom of Mt. Elden Rd, closing off the remaining road to the top of Mt. Elden. Add the following as Management Approaches:

- Authorized administrative vehicles only will be allowed access on Mt. Elden Rd.
- Shultz Pass Road motorized access will STOP at the existing western gate “A” at the bottom of Shultz Pass road near the “Y” area off Highway 180, thus closing the next ~54.5 miles to motorized travel [except for authorized administrative vehicles].
- These two Shultz Pass gate closures (“A” & “B”) would be beneficial because they would allow motorized access for various legal recreationists from Highway 180 only to the “Y” Parking area closure gate, and also motorized access from Highway 89 up to the closure gate at Shultz Pass, but would prevent current motorized travel abuse by downhill or “gravity rider” shuttle vehicles. “Gravity riders” and their bicycles are repeatedly shuttled on the ~4.5 miles between the “Y” Parking area and Shultz Pass to access the high elevation trailheads without having to ride their bicycles uphill. This ~4.5 miles between the “Y” and Shultz pass are most abused because this is the closet access from Flagstaff, aside from Mt. Elden Rd. It is highly unlikely that Gravity Rider shuttles would make the long trip around Flagstaff and up the longer east road to access Shultz Pass from Highway 89; However, many hiking, equestrian, nature watcher recreationists would drive that far to enjoy the forest.
- At the top of Shultz Pass another gate “B” should close off motorized travel from the east (e.g. vehicles coming from the eastern approach off Highway 89).
- Establish parking areas near these three gate closures (at the gate at the bottom of Mt. Elden Rd; at the gate at the bottom of Shultz Pass road; and at the gate at the top of Shultz Pass).

These gate closures and parking areas would also allow access for various recreationists who want to drive to these gates for hiker/cyclist/equestrian recreation activities.

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions such as permitting or prohibiting occupancy, use or access. However, the Forest Plan does include direction related to recreational access and user conflicts that will guide project and activity decisions in the future. For example, plan components related to recreational access can be found in FW-Rec-All-DC-2 and 4 and FW-RdsFac-DC-1. Plan components related to user conflicts can be found in FW-Rec-All-DC-4 and 6 and FW-Rec-All-G-2. Decisions to close or restrict access on the Coconino National Forest are determined during travel management planning. Public access determined by this process is guided by the motor vehicle use map. As part of this process, we identify the road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands.

Commenter: Gitlin, Alicyn

Comment:

Add the following Standard: • Gravity Riding should be prohibited and enforced by the Forest Service in the entire Mt. Elden area. PLEASE SEE the journal article that documents the growing abuse of our public lands by gravity riders and other public land abusers who use these lands as a large gymnasium for the sole purpose of adrenalin thrills: Shelley Burgin & Nigel Hardiman (2012): Extreme sports in natural areas: looming disaster or a catalyst for a paradigm shift in land use planning? Journal of Environmental Planning and Management pp1-20. DOI:10.1080/09640568.2011.634228. To link to this article: <http://dx.doi.org/10.1080/09640568.2011.634228>

Response:

The Forest Plan provides the framework that would guide site-specific consideration of this activity. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. The Forest Plan also has guidance on user conflicts. See FW-Rec-All-G-2. Whether this activity is impacting desired conditions in a particular area and how to manage this activity is a site-specific decision. The identification of specific prohibitions on mechanized travel would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212). For these reasons, a standard has not been added in response to these comments. Enforcement is not a forest plan component but is a requirement of the agency, regardless of the land management plan in effect. The level of Forest Service law enforcement is dependent on staffing, which is reflective of the budget allocated to the Forest Service from Congress.

Commenter: Gitlin, Alicyn

Comment:

The following are some methods to reduce bicycle impacts that should be incorporated into the Plan to guide future recreation/trail projects: • Walk bicycles in certain areas. • One-way-only trail sections. • Speed limits (though these may be difficult to enforce). • Restrict use by time of day, day of week, week of month, month of year. • Restrict use by season (e.g. to protect soils or sensitive habitats). • Separate different types of uses at trailheads and congested areas. • Party size limits. • Area permits/licenses, reservations, and trip permits, though these should be instituted only in special situations as a last resort. • Trail alignment to minimize soil erosion, avoid wetlands, sensitive plant or animal habitat, and sensitive archaeological or cultural features. • Trail alignment to maximize compatibility with adjacent land use and connecting trail use. • Natural and artificial design features that restrict bicycle speed, such as barriers and speed bumps, which are not an undue impediment to other non-motorized users. • Design features that enhance sight distance, e.g. locating the trail away from tall brush. • Design features that minimize trail erosion: proper grades, turn radii, tread hardening, and drainage control. • Wide or pull-out sections to facilitate safe passing. • Design features for user enjoyment: loop trails, scenic destinations, picnic/camp sites. • Barriers to prevent leaving trail. Block and obliterate (rehabilitate) unauthorized trails.

Response:

These methods are more appropriate for consideration at the project level when site specific information is being considered on a particular route. A Trails and Trailheads guideline in the forestwide Recreation section would require consideration of these types of design features at the project level to promote sustainable trail surfaces, prevent conflicts with neighboring lands, address impacts to other resources, and consider user experiences. See FW-Rec-Trails-G-1.

Commenter: Gitlin, Alicyn

Comment:

Desired Condition 1 states: "The ecosystem diversity of the wilderness and ecological attributes and processes that allows it to provide watershed values, habitat for native biota, panoramic vistas, and/or solitude are maintained. Recreation use and ecological functions retain the tribal values and the unique attributes of the alpine vegetation." (Draft Plan, p. 150, emphasis added) This is not being accomplished now. The Forest Service blatantly acknowledges its unwillingness to meet its requirements to protect the area for wilderness and cultural values when it says in its third Desired Condition: The mountain maintains attributes that provide historic and cultural values such as shrines. There may be inconsistencies with social encounters associated with the wilderness recreation opportunity spectrum on the Humphreys Trail year round and near the Snowbowl Ski Area in winter. (Draft Plan, p. 151)

Response:

The Forest Plan has been adjusted in response to this comment. In general, it is desirable to have human contact and social encounters consistent with ROS settings. See FW-Rec- All-DC-4 and SA-Wild-DC-8. The desired condition in Designated Wilderness has been adjusted to apply to all wilderness areas, not just the Kachina Peaks Wilderness, because social encounter inconsistency can be a problem in any high use area in any of the Forest's wildernesses. This desired condition still acknowledges that there may be inconsistencies in social encounters on Humphrey's Trail and near the Arizona Snowbowl. However, this plan component clarifies that the desire is that these inconsistencies do not detract from the overall wilderness character. There are provisions in the Designated Wilderness Areas section of the Forest Plan to maintain or protect wilderness and cultural values in the Kachina Peaks Wilderness. These include limiting group size, restricting overnight camping and recreational livestock use above tree line, and managing use levels through permit systems or other methods. See SA-Wild-S-1, 4, G-1, 2, and 3.

Commenter: Gitlin, Alicyn

Comment:

The size of the Study Area allows us to experience our favorite places and uses without encroaching on Walnut Canyon National Monument or overcrowding any particular location. The Forest Service should enlarge its Walnut Canyon Management Area to cover the entire footprint of the Walnut Canyon Study Area

Response:

No change has been made in response to these comments. The boundary of the Walnut Canyon Study Area would be difficult to find on the ground, which would make implementation difficult. The Walnut Canyon Management Area boundary was developed with topographical features and landmarks in mind to make the boundary more locatable on the ground. The Walnut Canyon Study has been completed and transmitted to the Secretary of Agriculture. The study presents 3 options to the Secretary, one of which is consideration of the area for special designation. The Secretary currently has the study under consideration and the Forest is waiting for a recommendation on how to proceed.

Commenter: Gitlin, Alicyn

Comment:

Please change FW-Rip-All-G Guideline #3 to say: LIVESTOCK USE SHOULD NOT OCCUR WITHIN RIPARIAN AREAS. LIVESTOCK WASTE SHOULD NOT BE STORED OR DISPOSED OF WITHIN RIPARIAN AREAS. Within riparian areas, an adequate height of herbaceous, water-loving vegetation should be maintained to protect streambanks. This guideline would not apply to structural developments such as gaps, pipelines, or other infrastructure used to minimize impacts to riparian areas at a larger scale.

Response:

Although the Forest Plan does not prohibit livestock from using riparian areas, a number of plan components would maintain and protect riparian composition, structure, and function. For example, the intent of a riparian guideline has been clarified and the guideline has been moved to the Livestock Grazing section because it only applies to grazing management. See FW-Graz-G-7. Plan components that support riparian desired conditions include: FW-Graz-G-4, 5, FW-Rip-All-DC-5; FW-Rip-Strm-G-1; FW-Rip-Spr-G-3; FW-Rip-RipType-G-3, 4; and FW-Rip-RipType-G-3.

Commenter: Gitlin, Alicyn

Comment:

We support the following Standards for Walnut Canyon Management Area MA-Walnut-S: 1 - "No paved roads or utility corridors occur except on the boundaries of the Walnut Canyon MA." (Draft Plan p. 125) 2 - "In the Walnut Canyon MA, national forest jurisdiction will be maintained for all National Forest System lands. No land exchanges will occur unless the purpose is to acquire land within this management area through exchange of national forest lands elsewhere." (Draft Plan p. 125)

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Gitlin, Alicyn

Comment:

We would like to see Desired Condition 1 strengthened to say that no roads will be allowed within a one- mile buffer zone around Walnut Canyon's rim. This will help to protect the fragile ecologic and archaeological resources of the area.

Response:

While the Forest Plan does not expressly apply a one mile buffer around Walnut Canyon, the impacts of roads on ecological and cultural resources is addressed by forestwide plan direction. See FW-RdsFac-DC-1 and 2, FW-RdsFac-G-1, FW-Hrtg-DC-1 and 2, and desired conditions for the various ecological resources on the Forest. Rather than impose a specific buffer that may be inadequate at times to protect these resources or is unnecessarily restrictive at other times, the revised Plan requires consideration of the impacts to these resources despite their exact proximity to the rim of Walnut Canyon. A guideline in the Walnut Canyon Management Area would require activities and uses on the forest be managed to protect cultural sites and to preserve habitat for disturbance-sensitive species both on the forest and within Walnut Canyon National Monument. See MA-Walnut-G-1. To ensure compatible management of overlapping resources, a management approach in the Walnut Canyon Management Area encourages coordination with the Monument.

Commenter: Gitlin, Alicyn

Comment:

"Fisher Point is a popular destination for hikers, mountain bikers, and outfitter-guided horse trips." (Draft Plan p. 124) Please check whether outfitter-guided horse trips are actually climbing the trail to Fisher Point, and whether they have visited this area within the last one to two decades. This may be a mistake.

Response:

The Forest Plan has been adjusted in response to this comment. The General Description and Background in the Walnut Canyon Management Area reflects that Fisher Point is a popular destination. The reference to outfitter-guided horse trips has been removed.

Commenter: Gitlin, Alicyn

Comment:

Coconino National Forest managers have been advised and should already be aware from their own investigations that Mt. Elden is suffering from increasing serious and negative impacts from recreation overuse, illegal trail building activities, improper road use, unsafe motorized and downhill “gravity rider” activities, large volume of recreationists, and recreationist conflicts on road and trails. On p. 103 of the Draft Plan, the following Desired Condition is given for Dispersed Recreation. We support this statement; yet the situation at Mt. Elden is not being handled in this way: Growing demand for recreation is balanced with other forest desired conditions, unless increasing capacity results in unacceptable negative effects on natural resources. We can document resource damage occurring in this area (i.e., Figures 5-9). Instead of protecting natural resources of Mt. Elden and Dry Lake Hills, the Forest Service plans to greatly expand the recreation system there. This is not acceptable unless the Forest Service can demonstrate an ability to protect the soils, diverse vegetation, and valuable habitats present there.

Response:

The Forest Plan has been adjusted in response to this comment. A large desired condition in the forestwide Dispersed Recreation sections has been divided into several plan components. Part of that plan component was converted in a desired condition for the All Recreation section. See FW-Rec-All-DC-6. This desired condition states: Recreation opportunities are balanced with the capacity of forest resources to support them and user conflicts are minimized. As development and population in the region continue to grow and new forms of recreation emerge, recreation settings on the Coconino NF are stable, retaining their natural character. Short-term increases in recreation during holidays and weekends do not result long-term adverse effects to other forest resources. Desired conditions in Trails and Trailheads promote a variety of trail types, challenge levels for diverse users in a variety of settings; the level of development at trails is appropriate for the site, use, ROS setting, and is sustainable; and damage to resources from visitor use at trails and trailheads is within the ability of forest to mitigate. See FW-Trails-DC-2, 3, 4. In addition, a desired condition in the Trails and Trailheads section states that trail use remains on the established trail surface, especially in high traffic or sensitive areas and unplanned user-created trails are rare. See FW-Trails-DC-11. Several guidelines are included in the Forest Plan to help ensure that decisions on recreation opportunities meet or move toward this desired condition. See FW-Rec-All-G-1 and 2. In addition, a guideline in Trails and Trailheads would require that unplanned, user-created trails be rehabilitated and managed to prevent future access. See FW-Trails-G-3. The Mount Elden Management Area also contains a desired condition on this topic. That desired condition seeks a trail system that is designed to be sustainable while balancing user experiences and impacts. See FW-MtElden-DC-1.

Commenter: Gitlin, Alicyn

Comment:

“The area north and west of Walnut Canyon provides dispersed recreation opportunities and receives heavy use adjacent to private land and Lake Mary Road.” (Draft Plan p. 124) Lake Mary Road is south and west of Walnut Canyon

Response:

The General Description and Background for the Walnut Canyon Management Area section has been adjusted as suggested. It now reflects that Lake Mary Road is south and west of Walnut Canyon.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service also states that watersheds must be protected, yet reclaimed water, which may contain various impurities, is being allowed to be used at the top of the watershed. In order to actually meet the Desired Conditions, the Forest Service needs to change the way this land is currently being used, and not allow reclaimed wastewater and a large commercial mechanized operation with a huge impact on ecology, cultural uses, and watershed so close to such a fragile area. The Forest Service must seriously reconsider the special use permit for Arizona Snowbowl if that permit forces the Forest Service to write Desired Conditions that violate its own regulations for managing Wilderness, Recreation Opportunity Spectrum, and Traditional Cultural Properties. (Draft Plan pp. 150-151).

Response:

The Forest Plan does not authorize the use of reclaimed water for snowmaking or any other particular use. The Forest Plan establishes plan components that will guide decisions on projects and activities that are made after it is in effect. For example, the revised Forest Plan includes desired conditions for watersheds to be functioning properly and to exhibit high geomorphic, hydrologic, and biotic integrity within their inherent capability. See FW-Water-DC-1 and 2. A desired condition for the Alpine Tundra ERU seeks to maintain the attributes and processes that contribute to the ecological diversity and habitat for native biota in the ERU. See FW-TerrERU-AT-DC-1. New decisions on the use of reclaimed water for snowmaking will need to be consistent with these desired conditions and all of the other guidance in the Forest Plan. Past decisions are outside the scope of the plan. The effects of existing authorizations for snowmaking and use of reclaimed water on alpine tundra and the species and cultural values associated with alpine tundra were analyzed in the decision to authorize use of reclaimed water and snowmaking.

Commenter: Gitlin, Alicyn

Comment:

Pronghorn management guidance from previous Forest Plan should be carried forward to the new plan.

Response:

The Forest Plan has been modified in response to this comment. The current plan and the revised Forest Plan have similar plan components for antelope except in many cases, the direction has been expanded to forestwide in the revised Forest Plan. Both plans have pronghorn as a management indicator species for grassland. have guidelines to promote safe access to water and safe passage through fences. See FW-WFP-DC-5 and 6 and FW-ConstWat-DC-2. promote open structure in grasslands and an understory mix that provides food and cover for pronghorn except the direction in the revised Forest Plan applies forestwide instead of being limited to Management Area 27 in the current plan. See FW-TerrERU-Grass-DC-4 and 8. improve and expand pronghorn habitat except the revised Forest Plan has objectives for improving habitat forestwide instead one management area. See FW-TerrERU-Grass-O-1, 2, and 3. would design new road and new trail locations to meet species life history requirements, maintain access to adjoining habitat, maintain habitat for dispersal and migration. The revised Forest Plan direction is forestwide. See FW-WFP-G-6 and 13. Both plans would coordinate with Arizona Game and Fish Department on hunting recommendations except the management approach in the revised Forest Plan in the section on Wildlife, Fish, and Plants applies forestwide: Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity. The revised Forest Plan would promote antelope survival and successful reproduction through timing restrictions forestwide. It also has desired conditions for the Anderson Mesa Management Area that promote sustainable pronghorn populations that can move freely and easily access winter range. See FW-WFP-G-8; MA-AMesa-DC-1, 3.

Commenter: Gitlin, Alicyn

Comment:

The popular campsites around Marshall Lake should have a restriction on the collection of dead and down firewood to protect remaining downed logs. Trash and toilet paper should be cleaned from campsites periodically.

Response:

No specific restriction has been added in response to this comment. The desired presence of downed logs is already addressed through plan language that supports base levels of coarse woody debris (including logs). For example, see FW-Soil-DC-2, FW-Rip-All-DC-1, FW-Rip-RipType-DC-5, FW-TerrERU-All-DC-2, FW-TerrERU-PJ-DC-2, 7, and 12, FW-TerrERU-AspMpl-DC-1, FW-TerrERU-PP-5, etc. If the levels of coarse woody debris near Marshall Lake are found to be lacking, site-specific restrictions can be considered to move the area back towards desired conditions. Forestwide direction also addresses concerns about public health and litter in recreation sites. Forestwide desired conditions promote minimal evidence of human waste and litter, sanitation issues, and resource damage. See FW-Rec-All-DC-6 and FW-Rec-Disp-DC-3. Forestwide guidelines recommend that recreational activities and settings be managed to maintain or move towards desired conditions, and to promote public health and safety. See FW-Rec-All-G-1 and 2. Restrictions or closures could be considered, but only after other feasible options have been implemented.

Commenter: Gitlin, Alicyn

Comment:

The Verde Valley MA contains numerous perennial streams that provide corridors for wildlife to migrate in response to weather events and climatic changes. Please add a guideline that fences on National Forest not block wildlife trying to travel along streambeds

Response:

The guideline related to construction for wildlife friendly fences has been retained with slight editorial adjustments to improve its clarity. See FW-WFP-G-6. Another guideline has been added to the Wildlife, Fish, and Plants section that requires structural improvements to be planned and managed to provide wildlife with safe use of water and to allow safe passage. See FW-WFP-G-5. These guidelines would be applicable to any new decisions on fence construction and/or modification of existing fencing. In addition, a sentence has been added to a management approach in Wildlife, Fish, and Plants to remind managers to reference current agency recommendations for improving wildlife habitat. It reads: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing.

Comment:

The following comments apply to the Flagstaff Neighborwoods, Sedona Neighborwoods, and Sedona/Oak Creek Management Areas, but can also apply to heavily used trails in other popular recreation areas, such as Fort Valley/Mount Elden, San Francisco Peaks, Fossil Creek, etc. Create a Management Approach of “Neighborwoods”-specific regular patrols tasked with monitoring particularly prevalent problems of pet waste, invasive non-native plants and other violations within “Neighborwoods.” Pet waste concentrations as observed at signed Trail Heads (TH) and at informal “social” THs are present in such quantity that runoff from Forest Service runoff might be a source of water contamination of Rio de Flag and Oak Creek Canyon. Personal observations at “Neighborwoods” THs point to more contamination the closer the site is to a residential area. The Draft Plan does not discuss pet waste AT ALL (key word search “neighborwoods”, pet waste) for Flagstaff, Sedona, and Oak Creek Canyon, and yet those interfaces are the very ones most contaminated. The Forest Service must create management criteria at “Neighborwood” interfaces with the goals of pet waste education, preventing pet waste water contamination issues, and removal of pet waste when accumulations become a problem.

Response:

Rather than only address sanitation and invasive species in "neighborwoods" (NFS land immediately adjacent to Flagstaff and Sedona), the Forest Plan provides several desired conditions that address these types of concerns wherever they may occur on the Forest. See FW-Rec-All-DC-5 and FW-Rec-Disp-DC-3. A management approach has been added to encourage the use of partnerships to assist in trail stewardship. It reminds forest managers to: Maintain and expand volunteer partnerships with local communities, organizations, groups, and agencies to assist in trail planning, construction, and stewardship.

Comment:

Invasives are non-native plants which collectively constitute “one of the gravest threats to the biodiversity of wildlands.” (DEIS v1 p. 1) Invasives are a problem because they displace native species, hybridize with native species, and affect biological communities and ecosystem processes. One example is Cheat grass invasion effects on fire frequency and fire temperature. Invasives follow heavy recreation user events at THs and new or recurrent traffic on motorized roadways, social trails and official and wildcat THs in Flagstaff, Sedona, and Oak Creek Canyon “Neighborwoods”. Invasives should be written into the direction for creation of a “Neighborwoods”-specific management patrol monitoring recreation impacts –guaranteed to increase in the next 15 years. Specific attention should be paid to dispersed campers and recreational shooters along the Kelly Motorized Trail System (see also section in this document addressing recreational shooting) as mechanized users spread invasives within the National Forests’ “Neighborwoods”. Shooting areas tend to get trampled and denuded of vegetation, allowing invasives to establish, displacing natives with negative long term effects. Effects will occur as users recreate at dispersed sites, denuding vegetation. Native vegetation replacement by invasives is serious because loss of natives “can alter fire regimes and increase erosion in localized areas.” (DEIS v1 p. 462) Invasives on the rise include Poaceae (grasses) with an invasive occurrence rate of 30% (cheat, Lehmann’s, Bermuda, buffel, fountain, and Johnson); Asteraceae with an invasion rate of occurrence of 20% (3 kinds of knapweed); and Thistle and Toadflax with an invasive rate of occurrence with a slightly lower rate of 20% each. [Identified in “Development Of A Categorized List Of Invasive Non-Native Plants That Threaten Wildlands In Arizona” Arizona Wildlands Invasive Plant Working Group, pub. 2005] Blackberry is an invasive of concern in all riparian habitats. Particular strategic management of Sedona and Oak Creek Canyon riparian areas for blackberry invasion containment within Coconino National Forest “Neighborwoods” must be written into the final EIS.

Response:

The forestwide Invasive Species section addresses how to manage the spread and treatment of invasive species, wherever they occur. Specific actions such as those suggested in the comment could be considered and implemented. In addition there is a guideline in All Recreation that would require visitors with recreational stock to carry certified weed free feed to prevent the spread of invasive plants. See FW-Rec-All-G-6.

Comment:

ROS: The Final Plan must restrict Recreational Opportunity Spectrum (ROS) classes as administered within “Neighborwoods” to those allowing less development. Less development would include: elimination of grazing in “Neighborwoods” forbidding recreational shooting within “Neighborwoods”; and limiting dispersed camping sites, recreational shooting, and disturbance associated with Kelly Motorized Trail System. Dispersed recreation of campers/RVs and motorized recreationists are a vector for spreading invasives, while also denuding vegetation. Invasive control in identified impacted areas should be addressed via protocols from the “Final Environmental Impact Statement for the Treatment of Noxious or Invasive Weed” (USDA Forest Service 2005).

Response:

No adjustments were made in response to this comment. ROS classes are based on the conditions present. One of the criteria that would move an area to a more developed ROS class would be the fact that it is near a more developed area, such as a neighborwood. Applying a more primitive ROS class to these areas would be contrary to the ROS process. The Forest Plan does not contain decisions to eliminate domestic livestock grazing or recreational shooting in these areas. The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions such as permitting or prohibiting occupancy, use or access. Decisions to close an area to domestic livestock grazing or recreational shooting are determined at the project level based on site specific information. The Forest Plan provides guidance for those projects. For example, an All Recreation guideline requires recreational activities and locations to be managed to have minimal user conflicts. See FW-Rec-All-G-2. This direction may help guide a project that is considering the propriety of recreational shooting in a particular area. The same is true for the suggestion to limit activities associated with the Kelly Motorized Trail System. The Forest Plan does not include specific decisions on these activities or uses. However, the Forest Plan does provide guidance that would influence management decisions on these activities and uses. Providing a broad spectrum of developed and dispersed recreation settings and minimizing user conflicts are desired conditions of the Forest Plan. See FW-Rec-All-DC-4 and 6. As noted above, the Forest Plan includes an All Recreation guideline requires recreational activities and locations to be managed to have minimal user conflicts. See FW-Rec-All-G-2. This forestwide direction applies to the entire Forest, including the neighborwood management areas. It provides sufficient direction to guide projects under consideration in the neighborwood management areas. Decisions to control dispersed motorized camping and motorized recreation are also made at the project level. Specific access and motorized use determinations are made through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). The Forest Plan contains a standard that acknowledges the motor vehicle use maps, which are produced as part of the implementation of the Travel Management Rule. Camping corridors for motorized dispersed camping are identified on the motor vehicle use maps. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1: Prohibit motor vehicle use beyond the designated system of roads, trails, and areas (including areas designated for motorized big game retrieval), as defined on motor vehicle use maps, except for those uses authorized by law, permits, and orders in connection with resource management and public safety.

Comment:

Neighborwood Patrols: Volunteers should be incorporated into visitation, education and sanitation efforts of “Neighborwoods Patrols” to create a sense of ownership, and all actions must be tailored to specific areas. However, to ensure consistency, these projects should be led by Forest Service staff. Examples include instituting volunteer-driven, Forest Service initiated, “Resource Steward” challenges to the Kelly Trail System users community even before the System is completed. Areas to work on would include official Kelly Trail System trailheads at Lake Mary Rd. and Munds Park trailheads. Volunteer blackberry abatement and other invasive weed eradication at Flagstaff, Sedona, and Oak Creek Canyon area official and social trailheads must be addressed with strategies tailored to specific forest and riparian sites. The Forest Service must incorporate Forest Service staff with volunteer engagement as well as coordination with appropriate regional environmental corps. Multi-agency coordination can result in management cost reductions, generate a wider variety of trends towards ideal conditions and more intra- regional opportunities for user engagement.

Response:

A management approach suggesting "neighborwood patrols" by volunteers has not been added to any of the management area sections. The concept of working with volunteers and other organizations is already addressed in a forestwide All Recreation management approach, which states: Collaborate with state and federal agencies including National Park Service, Arizona State Parks, AZGFD, concessionaires, chambers of commerce, nonprofit organizations, Northern Arizona University, state, city and county governments, recreation stakeholders, local communities and citizens, partners and volunteers regarding provision of recreation opportunities in Northern Arizona and communicating these to the public. Work in partnership to find creative solutions to operate and maintain recreation sites, trails and trailheads, and provide interpretive and environmental education. Determine gaps and overlaps in opportunities and resolve conflicts between users, and providers. Work together to determine activities that increase our capacity to serve a diverse population while promoting social, economic and natural resource sustainability. As suggested, there are area-specific management approaches about working with the community, residents, and stakeholders in the Flagstaff Neighborwoods, Mount Elden, Red Rock, House-Mountain-Lowlands, Sedona Neighborwoods, Verde Valley, and C.C. Cragin Management Areas. There are also topic-specific management approaches about working with the community, residents, and stakeholders in the sections on Trails and Trailheads, Interpretation and Education, Livestock Grazing, Fire Management, Invasive Species, Wetlands, and Springs.

Comment:

We also recognize that the Coconino NF and its wilderness areas receive a large amount of recreational visitors which can adversely affect those areas' characteristics. However, we strongly encourage the agency to not manage wilderness solely as a recreation designation. Wilderness plays an important role in other areas of management such as watershed health, refugia for wildlife, preservation of cultural sites, sources of clean air, and as local economic drivers. Moreover, wilderness preservation grows increasingly important to provide reservoirs of biodiversity in the face of global climate change.

Response:

The Forest Plan provides direction in the Wilderness section that reflects both the ecological and social value of wilderness. The Forest Plan includes a variety of desired conditions for wilderness area, including retention of primitive character, ecosystems and ecological resources that are functioning properly and reflecting natural processes, and ecosystems that are providing a variety of habitats that support species diversity. See SA-Wild-DC-1, 2, and 3. Disturbances, including fire and flooding, should be able to play their natural role. See SA-Wild-DC-4. All of the standards in the Wilderness section are designed to protect these desired wilderness conditions from potential impacts from recreational activities. See SA-Wild-S-1 through 5. All of the guidelines in the Wilderness section are designed for the same purpose. See SA-Wild-G-1 through 11.

Commenter: Gitlin, Alicyn

Comment:

We strongly support Alternative C's recommendations for 13 new wilderness areas totaling 92,386 acres.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such

resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

We were, to say the least, stunned that Alternative B (Proposed Revised Plan; USFS 2013a:12) recommended only three areas (less than 16% of potential acreage) the agency itself agreed met potential wilderness criteria. (Forest Service 2013b:3; Forest Service 2013a:18). The forest's "Potential Wilderness Area Evaluation Report" (Forest Service 2013b) stated that areas other than presented in Alternative B have had mixed input for and against their recommendation and the value they would add to the National Wilderness Preservation System was not as persuasive. (Forest Service 2013b:6). As a collective group that has provided detailed information on many of the Potential Wilderness Areas, we ask for the rationale for why certain areas were not supported by the agency when other areas, with the same ratings in the Potential Wilderness Area Evaluation Report, are being supported by the agency. Since 2007, conservationists have consistently supported wilderness protection for all the potential wilderness areas that CNF itself rated high for potential wilderness designation. (Forest Service 2013b:3). We submit that it is disingenuous for the agency to suggest the wilderness suitability rationale provided, including its own, was not persuasive. For example, our earlier wilderness recommendations (GCWC 2007; GCWC and CBD 2007; GCWC et al. 2010; and AWC 2007, 2007a, 2007b, 2007c), as well as our joint comments on draft inventory and capability processes for Potential Wilderness Evaluation (GCWC and AWC 2009) demonstrate our long-term commitment to support wilderness designation and afford the highest protection for the full spectrum of native species as well as experiential opportunities dependent on intact natural ecosystems, and quiet recreation. We emphatically contend that, given the Coconino National Forest's critical ecological and significant recreational value to northern Arizona, protection of wilderness character should be a forest management priority. This process of identifying lands recommended for potential wilderness consideration is a vital first step in protecting areas and landscapes deserving of full wilderness designation.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on

this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Gitlin, Alicyn

Comment:

In the same paragraph that the Forest Service touts, “No paved roads or utility corridors occur except on the boundaries. Major roads provide access and other areas are closed to vehicles. Walnut Canyon and its major side drainages are closed to motorized vehicles,” it goes on to say, “The areas south and east of Walnut Canyon provide more remote dispersed recreation opportunities including motorized travelways.” (Draft Plan p. 124) Funny, but we think the most “remote dispersed recreation opportunities” are provided in areas that don’t include motorized travelways. The Forest Service should not pretend that motorized roadways assist those seeking “remote dispersed recreation opportunities”. Instead, those of us seeking these opportunities must go to great lengths to escape motorized roadways if we want to participate in quiet recreation, and Walnut Canyon Study Area is a rare place where we can do that.

Response:

It is understandable that recreationists have different beliefs about what constitutes dispersed recreation. For purposes of the Forest Plan, dispersed recreation includes both non-motorized and motorized recreation. As described in the General Description and Background section for Dispersed Recreation: Dispersed recreation consists of activities that take place in less improved settings, outside of or disconnected from developed or concessionaire-operated facilities. The Glossary includes the following definition for dispersed recreation: The type of outdoor recreation that tends to be spread out over the land and in conjunction with roads, trails, and undeveloped waterways. Activities are often day-use oriented and include hunting, fishing, boating, hiking, off-road vehicle use, cross-country skiing, mountain biking, and rock climbing. Accordingly, motorized recreation does not conflict with the Forest Plan's definition of dispersed recreation.

Commenter: Gitlin, Alicyn

Comment:

No overnight camping rules should contain language to address traditional cultural uses. (DEIS v2 p. 664).

Response:

No change has been made in response to this comment. The Forest Plan includes a desired condition for tribal practitioners to have access to areas that provide them an opportunity to practice traditional activities. See FW-Trbl-DC-2. In addition, a desired condition in Forest Products promotes the availability of forest products for traditional and ceremonial uses with minimal restrictions and consistency with law, regulations, and agreements with tribes. See FW-FProd-DC-3. These plan components would be taken into account in projects that propose to manage or limit overnight camping.

Comment:

In addition to determining suitability for timber production on portions of the national forest, the Forest Service also must review its prior classification of lands as unsuitable for timber production. See 16 U.S.C. § 1604(k); 36 C.F.R. § 219.14(b) (1982). To inform analysis of timber suitability, we ask the Forest Service to consider and analyze the following criteria for designating lands as unsuitable for timber production: • High or severe soil erosion hazard identified by Terrestrial Ecosystem Survey. • Slopes steeper than 20 percent. • Lands within one site-potential tree height of perennial or intermittent streams or wetlands (e.g., generally 100-150 feet on either side of a stream bank in conifer forest vegetation types). • Contiguous areas larger than 1,000 acres without roads in all vegetation types. • Occupied and/or critical habitat of threatened or endangered species or candidate species proposed for listing. • Designated conservation areas for sensitive or management indicator species. • Occupied locations of endemic species with ranges limited to the national forest. • Lands impacted by high-severity fire effects to vegetation or soil.

Response:

The process for determining timber suitability is described in the Timber Suitability section in Chapter 4 of the Forest Plan and in the Timber Suitability Calculation section in Appendix G of the environmental impact statement and is conducted each time the Forest Plan is revised as required by law. The environmental impact statement and the Timber Suitability section in the Vegetation and Fire Specialist Report (Forest Service, 2015) demonstrate how the Coconino National Forest identified and described each Ecological Response Unit based primarily on the Terrestrial Ecosystem Survey (TES) which includes information on soils and erosion hazard. As described in the Timber Suitability section of the Vegetation and Fire Specialist Report, those lands that would suffer “Irreversible Resource Damage”, including those where with high erosion risk (particularly on steeper slopes), were excluded from the lands suitable for timber production. Similarly, lands where harvesting on steep slopes would cause irreversible resource damage, were also excluded from the lands suitable for timber production. Many lands that are steep, but could still be harvested using current techniques, were nevertheless excluded because they are not cost efficient; for the same reason, lands that lack roads or are too isolated were also excluded. Areas identified as water or as having riparian soils are not designated as lands suitable for timber production. The Forest Plan also provides guidance for all management activities, including timber harvest, which limits damage to all riparian areas (FW-Rip-All-G-1, -2, -3, and Management Approaches; FW-Rip-Strm-G-1, -2, and Management Approaches). These guidelines and management approaches provide for aquatic management zones designed to minimize detrimental changes to streams and riparian areas within each project. Excluding areas from lands suitable for timber production that would be associated with candidate species proposed for listing would be too speculative and premature at the time of this analysis. However, areas of critical habitat for endangered and threatened species, such as the Mexican Spotted Owl, are excluded from lands suitable for timber production under the category of lands with management prescriptions that preclude timber production. There are not specially designated “conservation areas” for sensitive or management indicator species (MIS) unless the species is also designated as endangered or threatened, in which case, the lands would be excluded based on management prescriptions limitations. During the analysis process for each project conducted under this Forest Plan, the Forest evaluates the effects of proposed actions on sensitive species and endemic species with ranges limited to the national forest. Actions that may negatively affect the habitat of these species are evaluated and mitigated, as appropriate. The Plan also provides a number of guidelines and management approaches that are specifically geared towards protecting and enhancing the habitat for threatened, endangered, and sensitive species and endemic species within limited ranges. Additional details regarding viability are included in other responses. Areas that have been impacted by high-severity fire may be excluded from the lands suitable for timber production if monitoring has determined that the long term losses in soil productivity are such that the areas is incapable of producing industrial wood. Small changes or short term changes in soil productivity, much less changes that are strictly limited to surface vegetation, do not in and of themselves make the land unsuitable for timber production. Areas that are incapable of producing industrial wood are identified during Forest Plan revision as part of the timber suitability determination process. The purpose of identifying lands that are suitable for timber production is solely to calculate the long term sustained yield and allowable sale quantity of the Forest. Those lands identified a suitable for timber production are capable of being managed for growing, tending, harvesting, and regenerating crops of trees on a regulated basis. In general, excluding lands from timber

production does not provide any protections or prevent any particular land management activity. Lands categorized as unsuitable may still be managed through timber harvests, which is one of a suite of vegetation management tools. The concerns expressed in the comment are actually addressed through the relevant guidelines and management approaches described in the Forest Plan.

Commenter: Gitlin, Alicyn

Comment:

Regarding the last criterion above, logging and planting trees on sites impacted by wildland fire poses a different benefit-to-cost analysis from management of unburned forests. Long-term losses of soil productivity resulting from synergistic impacts of fire and mechanical disturbances (e.g., “salvage logging”) must be considered and analyzed in the timber suitability determination. (Beschta et al. 2004). Severe fire effects on suitable timberlands are reasonably foreseeable. The timber suitability designation in the revised forest plan should include a caveat that forest lands affected by severe fire effects to vegetation or soil will be managed for natural recovery rather than for economic production.

Response:

Adjustments have been made to the plan in response to this comment. A management approach has been added in the section for All Ecosystems: Following large or uncharacteristic disturbance events, focus management actions on human health and safety, long term restoration, soil and watershed stabilization, restoration or protection of ecosystem processes and resource values. In addition there is a monitoring question that relates to this topic: Have areas classified as unsuited for timber production become suitable? Another monitoring question: Have there been changes that have resulted in unforeseen issues requiring plan amendments? These questions capture the reverse situation in which lands classified as suited for timber production become unsuitable.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should elaborate on how it plans to permanently protect the 2,700 sites that have been determined to meet the criteria of eligibility for the National Register of Historic Places on the Forest. (Draft Plan, p. 85).

Response:

The plan components in the Heritage Resources section of the Forest Plan provide a framework that will guide decision on how to manage and protect the heritage resources on the Forest, including the sites that are eligible for the National Register of Historic Places. How a particular site will be managed and protected is a project level decision that will be based on site specific information.

Commenter: Gitlin, Alicyn

Comment:

There seems to be little evidence that the Forest Service is aiming toward the Desired Conditions and Management Approaches on pp. 89-90. There is nothing here that addresses what happens when the tribes disagree with the Forest Service. It seems the only remedies listed are consultation and MOU's. The Forest Service should provide and allow the tribes the opportunity to disagree, create a specific management approach for resolving disagreements, and actually listen to the tribes when they do say no. (Draft Plan p. 89-90).

Response:

The Coconino NF follows law, policy, guidance, and directives on communication and notification to tribes. These include the following, which have been added to Appendix D in the plan - Other Sources of Information: American Indian Religious Freedom Act (16 U.S.C. 1996), Archeological Resources Protection Act of 1979 (16 U.S.C. 470 aa-mm), National Historic Preservation Act (16 U.S.C. 470 et seq.) and regulations implementing Section 106 (36 CFR Part 800), , Native American Graves Protection and Repatriation Act (25 U.S.C. 3001, et. seq. and 43 CFR 10), National Environmental Policy Act Implementing Regulations (40 CFR Part 1501.2(d)(2)), Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2000), Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Feb. 11, 1994), Forest Service Manual 1560 and Forest Service Handbook 1509.13. Consultation with tribes and the importance of incorporating their perspectives, concerns, and traditional knowledge into management decisions is discussed in Tribal Relations and Uses section of the Forest Plan. For example, the Forest Plan acknowledges the special and unique government-to-government relationship (i.e., one sovereign nation to another) based on the U.S. Constitution, treaties, and statutes. See General Description and Background for the Tribal Relations and Uses section. Rather than attempt to unilaterally create a particular process to resolve disagreements with tribes through a plan component, the Forest Plan includes a management approach in the Tribal Relations and Uses section that suggests developing MOUs with tribes. It reminds forest managers to: Develop memorandums of understanding (MOUs) between the forest and those consulting American Indian tribes with which an MOU does not currently exist to guide consultation processes and reflect the tribes' particular perspectives and interests.

Commenter: Gitlin, Alicyn

Comment:

should consider it for a Special Land Designation that will prioritize protection of this scenic, recreational, and ecological treasure.

Response:

The Walnut Canyon Study has been completed and transmitted to the Secretary of Agriculture. The study presents 3 options to the Secretary, one of which is the one you are advancing. While the Secretary has the study under consideration, the Forest will not be taking any steps that limit the Secretary's decision space. Although the Forest Plan does not manage Walnut Canyon under a special land designation, the plan components in the Walnut Canyon Management Area offer considerable protection to this area. Standards in this management area prohibit the development of new paved roads or utility corridors and require that the land be maintained in the National Forest System. See MA-Walnut-S-1 and 2. A guideline in this management area requires that activities and uses on the forest be managed to protect cultural sites and to preserve habitat for disturbance-sensitive species both on the forest and within the neighboring Walnut Canyon National Monument. See MA-Walnut-G-1. Another guideline requires permits for research projects in rock shelters and archaeological site caves to protect archaeological and historical resources. See MA-Walnut-G-2. A management approach reminds managers to: Coordinate with the Walnut Canyon National Monument to develop and ensure compatible management of overlapping resources in this management area.

Comment:

Management Approaches for outreach to tribes could include: holding meetings on reservations to reach those for whom travel is difficult; providing native translators; recording oral statements for those who can't write or don't speak English; proactive advertising for tribal participation opportunities through radio/newspaper ads and public service announcements; hanging flyers about projects.

Response:

Specific outreach methods are not listed in the Forest Plan. Outreach to tribes is project specific and could include all of the suggestions in the comment. The management approaches for Tribal Relations have a more strategic approach to tribal relations and include working with area tribes as follows: The Coconino NF and area tribes have a mutual interest in maintaining healthy, sustainable populations of plants and other resources important for traditional and cultural purposes. Work with area tribes to identify, collaboratively manage, and monitor these resources, as well as build and maintain more detailed information about culturally important plants. Continue to manage the land in a spirit of shared stewardship with the tribes. Recognize the importance of a strong relationship with American Indian tribes and groups, and ensure Coconino NF personnel continuously cultivate those relationships. Meet regularly with consulting tribes to better understand their needs and viewpoints and consult with them in the management and interpretation of cultural sites. Enhance tribal relationships and communications through volunteer opportunities with tribal members. In addition, consider formally designating one person as a tribal relations coordinator to facilitate the tribal consultation process and maintain a record of tribal consultations. Outreach to tribes follows law, policy, guidance, and directives on communication and notification to tribes. These regulations include the following, which have been added to Appendix D in the plan - Other Sources of Information: American Indian Religious Freedom Act (16 U.S.C. 1996), Archeological Resources Protection Act of 1979 (16 U.S.C. 470 aa-mm), National Historic Preservation Act (16 U.S.C. 470 et seq.) and regulations implementing Section 106 (36 CFR Part 800), Native American Graves Protection and Repatriation Act (25 U.S.C. 3001, et. seq. and 43 CFR 10), National Environmental Policy Act Implementing Regulations (40 CFR Part 1501.2(d)(2)), Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2000), Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Feb. 11, 1994), Forest Service Manual 1560 and Forest Service Handbook 1509.13.

Comment:

The Fort Valley/Mt. Elden Management Area is a rare and diverse mountain resource immediately adjacent to Flagstaff – a large portion should be considered a WILDERNESS AREA; at the least it should be classified as ROS class primitive or semi-primitive non-motorized. For example: Other key mountain resources that are similar to Mt. Elden, e.g. Mt. Humphreys and Kendrick, have WILDERNESS areas in a Forest Service attempt to protect their resources. All other mountain resources are miles away from Flagstaff and not nearly as accessible. Consequently, the nearby community uses the Mt. Elden area more than other mountain areas near Flagstaff. In addition, increasingly larger populations from metropolitan cities of Arizona flock to Mt. Elden to get away from the increasingly hot desert climate in surrounding Arizona. Phoenix's population growth is projected to increase at a rate three times greater than the rest of the U.S. Mt. Elden's recreational use is also increasing beyond environmental capacity due to Flagstaff's increasing population, especially due to the growing population of NAU students (projected NAU growth by 2015 = 25,000 local students). These combined factors place Mt. Elden in environmental danger and actions must be taken to preserve and sustain this precious mountain resource.

Response:

The Mount Elden area was considered for wilderness designation as part of the wilderness evaluation process the Forest conducted for the forest plan revision effort. The Mount Elden area was screened out during the inventory step of the evaluation. After boundary adjustments were made for private land, communication towers, Forest Service lookout tower, utility corridors, other special use permits, and associated roads, the area no longer met the 5,000 acre criteria for potential wilderness areas. It was removed from further consideration at that time. The Mount Elden Management Area has not been assigned Recreation Opportunity Spectrum (ROS) settings of primitive or semi-primitive non-motorized as suggested. The ROS settings for alternatives B, C and D were mapped using a raster-based GIS approach which incorporated and elaborated on agency protocols established in 2003. Through the use of map algebra, naturalness, access, remoteness, facilities and site management were incorporated to identify the spatial arrangement of recreational opportunities and ROS classes throughout the Forest. The results of this modeling reflect that less than 10 percent of the management area should have an ROS class of semi-primitive non-motorized and none of the management area should have an ROS class of primitive. There is no sound rationale to adopt the commenters suggestion and to do so would create a situation where many existing uses in the area are inconsistent with the ROS class for the area.

Comment:

While we commend much of the analytical effort found in the Potential Wilderness Area report, there appears to be a problematic predisposition to provide unduly low ratings for “Availability” based on several considerations, resulting in only one “High” rating out of 15 areas analyzed (see Potential Wilderness Evaluation Report, page 8). First, the need for vegetation treatments and fire presuppression appears to be cited in multiple cases as limiting availability. Although wilderness management can and should require certain methods and standards to conduct these activities, indeed these activities can proceed in wilderness. Second, providing administrative access for permittees and wildlife managers also appears to be cited as contributing to low availability ratings. Again, while appropriate approvals and restrictions would be necessary to maintain wilderness characteristics, necessary administrative access can continue in wilderness areas. These two considerations should not be used to preclude an area from being recommended for wilderness management.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this

screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

In the Affected Environment section of the DEIS (Volume 2), the Forest Service reports on its history of consulting with, yet ignoring the requests of, the regional tribes who honor the “San Francisco Peaks, one of the most revered traditional cultural properties in the Southwest” (DEIS v2, p. 667): The Coconino NF has been working with and consulting tribes in northern Arizona for many years before it became a requirement under law, policy, and Executive Order. The lands that presently constitute the forest have many sites, areas, and features that are considered to be ancestral or of traditional and ceremonial importance to a number of southwestern tribes. The forest archaeologist and tribal relations specialist have worked closely with these tribes to identify their traditional cultural properties, which occur throughout the entire forest, and have taken care to ensure they have not been impacted by project activities, other than those associated with the Arizona Snowbowl. The San Francisco Peaks, one of the most revered traditional cultural properties in the Southwest, is the location of the Arizona Snowbowl, and has been the subject of consultation with the Hopi Tribe since the 1970s. The forest routinely consults 13 tribes, (the Pueblo of Acoma, Ft. McDowell Yavapai Nation, Hualapai Tribe, Havasupai Tribe, Hopi Tribe, Navajo Nation, San Carlos Apache Tribe, San Juan Southern Paiute Tribe, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation, Yavapai-Prescott Indian Tribe, and Pueblo of Zuni), 7 Navajo Chapters (Cameron, Coalmine Canyon, Dilcon, Gap-Bodaway, Leupp, Tolani Lake, and Tuba City Chapters), and the Dine’ Medicine Man’s Association. To date, tribal concerns have involved access to areas to perform ceremonies and collect plants, firewood, and other forest products for traditional cultural purposes. Tribes have appreciated the “shared stewardship” philosophy the forest used in the past for project consultations and management activities. Tribes support the forest’s efforts at site protection and for active prosecution of Archaeological Resources Protection Act cases. Tribes, however, have also voiced the desire for more transparency in knowing how their input is used in the forest’s decision-making process and want greater involvement of forest staff and line officers in face-to-face consultations. Some complaints have been made about inconsistent approaches and procedures between different forests and that too often forest personnel leave before tribes know who to contact if they have needs or concerns. Tribal relations have further deteriorated since the 2005 “Record of Decision for the Arizona Snowbowl Facilities Improvement,” which approved the use of reclaimed water at the ski area that lies within the San Francisco Peaks Traditional Cultural Place. Since then, numerous statements have been made by tribes that the forest holds no credibility with the tribes, and tribes lack faith in the forest’s stated desire to support tribal needs and values. Many tribes feel their trust in the forest has been broken because of the Snowbowl decision. (DEIS v2, pp. 667-668, emphasis added) And, reported under Cumulative Effects: “. . . arguably the largest strain on tribal relations between the Coconino NF and tribes it consults with has been the decision by the forest related to the Arizona Snowbowl, as mentioned earlier... While plan alternatives would provide protection of sacred sites from other types of forest uses in a primarily strategic manner, they would not necessarily prohibit site-specific decisions that tribes could have objections to.” (DEIS v2, p. 669) The Forest Service states right here that their own rules and regulations have not been followed with regard to the Arizona Snowbowl. It also acknowledges that the San Francisco Peaks is one of the most revered traditional cultural properties in the southwest, but does not mention any way to remedy the situation, which has violated the Forest Service’s own policy. The Forest Service should listen to the tribes’ requests and take their input seriously, and develop policy on Arizona Snowbowl that is consistent with its other policies, and plan to be sensitive to cultural needs in future commercial and special use permitting. The Forest Service should create a Plan for how it will deal with future disagreements. The Forest Service should not create policies ‘except for Arizona Snowbowl.’ It should not be arbitrary in its decision making. The Forest Service should be consistent in its consideration of tribal input, and put consistent language into the Forest Plan.

Response:

The Coconino NF follows law, policy, guidance, and directives on communication and notification to tribes. These include the following, which have been added to Appendix D in the plan - Other Sources of Information: American Indian Religious Freedom Act (16 U.S.C. 1996), Archeological Resources Protection Act of 1979 (16 U.S.C. 470 aa-mm), National Historic Preservation Act (16 U.S.C. 470 et seq.) and regulations implementing Section 106 (36 CFR Part 800), , Native American Graves Protection and Repatriation Act (25 U.S.C. 3001, et. seq. and 43 CFR 10), National Environmental Policy Act Implementing Regulations (40 CFR Part 1501.2(d)(2)), Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2009), and the National Forest Management Act (16 U.S.C. 1601 et seq.).

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Coconino NF Forest Plan Revision
May 2016

2000), Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Feb. 11, 1994), Forest Service Manual 1560 and Forest Service Handbook 1509.13. Consultation with tribes and the importance of incorporating their perspectives, concerns, and traditional knowledge into management decisions is discussed in Tribal Relations and Uses section of the Forest Plan. For example, the Forest Plan acknowledges the special and unique government-to-government relationship (i.e., one sovereign nation to another) based on the U.S. Constitution, treaties, and statutes. See General Description and Background for the Tribal Relations and Uses section. Rather than attempt to unilaterally create a particular process to resolve disagreements with tribes through a plan component, the Forest Plan includes a management approach in the Tribal Relations and Uses section that suggests developing MOUs with tribes. It reminds forest managers to: Develop memorandums of understanding (MOUs) between the forest and those consulting American Indian tribes with which an MOU does not currently exist to guide consultation processes and reflect the tribes' particular perspectives and interests.

Commenter: Gitlin, Alicyn

Comment:

Regarding FW-WtrShd-obj: th Class 2 (functioning at risk) and Class 3 (impaired) 6 code watersheds are trending toward Class 1 th in 5 to 7 priority 6 18) 8 code watersheds during the 10 years following plan approval. (Draft Plan p. There is a lack of any reference to management of grazers on the overall watershed plan to address climate change. These are two interrelated impacts that need verifiable management objectives within a 10 year metric. Aside from cattle, USFS managers need to better define elk population numbers in coordination with the AGFD. (Maschinski et al. 2006, Beschta et al. 2013, Yongguang et al. 2013).

Response:

No change has been made to this objective in response to this comment. The intent of the objective is to seek to improve conditions in priority 6 watersheds, not to address one possible factor that could be impacting the watersheds. This ensures that the most important watersheds receive attention over the life of the plan regardless of the reasons for their impairment. Moving watersheds toward desired condition is one way the Forest is addressing climate change. Watersheds in desired condition should be more resilient to the anticipated effects of climate change. The management of permitted livestock grazing is generally discussed in the Livestock Grazing section. Plan components in that section include a desired condition for permitted livestock grazing to be consistent with the desired conditions for other resources (which would included Watershed) and a guideline to managed to meet, or move towards, the desired conditions for forest resources such as soil, water, vegetation, and species. See FW-Graz-DC-2 and FW-Graz-G-2. How domestic livestock grazing will be conducted in any particular area will be based on site-specific information and analysis. Grazing is also addressed in FW-TerrERU-Grass-G-2. The Plan addresses other grazers in the Wildlife, Fish, and Plants section, which includes a desired condition for forest activities to support sustainable populations of native plant and animal species distributed throughout their potential natural range. See FW-WFP-DC-1. This section also includes a management approach regarding coordination with the Arizona Game and Fish Department to manage wildlife populations for the maintenance and improvement of elements of watershed condition. It states: Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should create an appendix listing lawsuits filed and results of those cases, so the public can see where Forest Service obligations have been defined in court.

Response:

An appendix of lawsuits filed against the Forest has not been added to the Forest Plan. The Forest Plan has been designed to not repeat existing obligations, such as law, regulation, or policy because these authorities and the obligations they create can change over time. The same is true of past litigation.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should tell us how it will apply the document USDA Policy and Procedures Review and Recommendations: Indian Sacred Sites (2012, available at <http://www.fs.fed.us/spf/tribalrelations/documents/sacredsites/SacredSitesFinalReportDec2012.pdf>). It does not appear to be referenced under any of the alternatives.

Response:

As a general rule, the Forest Plan includes references to applicable laws, regulations, policies and other information in Appendix D, Other Sources of Information. The Indian Sacred Sites Report has been added to the Heritage Resources, Tribal Relations, and Uses section in Appendix D of the Forest Plan. As noted in the Executive Summary, the Report does not, by itself, change policy or have any effects, significant or otherwise, on the human or natural environment and does not constitute final agency action. The Report is a review of law, policy, and procedures, with recommendations for changes based on Tribal consultation and public comments. Including the Report in Appendix D of the Forest Plan provides a reminder to forest managers that this Report is available as a resource when sacred sites are involve.

Commenter: Gitlin, Alicyn

Comment:

There should be a quantifiable way to measure the impact of motorized recreation on scenery, i.e., number of visible trails on X acres of land or visible from certain viewsheds. Creating a quantifiable metric will allow observation of change over time and corresponding adaptive management. Designate an authority to monitor changes over time. Describe thresholds for when to take actions, such as closing areas to use.

Response:

The Forest Plan addresses scenery through the application of the Scenery Management System. The Scenery Management System, as outlined in Agricultural Handbook 701, is today's best science to achieve high-quality scenery as an outcome of National Forest ecosystem management practices. Scenery Management System inventories were completed for the Coconino NF as part of the land and resource management plan revision process. Visibility is used as one of the factors when inventories are develop under the Scenery Management System. The principles of scenery management are to be applied during project level planning. Additional information on the Scenery Management System is included in the Scenery Resources section in Appendix C of the environmental impact statement.

Comment:

The Forest Service should add Standards and Guidelines for how it will train Forest Service employees and Special Use Permittees about interactions with tribal members engaging in traditional land uses, in a manner that fosters mutual trust and respect. Too often we have received reports of people being treated in ways that exacerbate tensions. The Forest Service has a responsibility to provide access to resources it holds in trust. (Draft plan, pp. 90-91).

Response:

A management approach has been added to the Tribal Relations specific to this comment. It reminds forest managers to :Provide training to forest employees about interactions with tribal members engaging in traditional land uses, in a manner that fosters mutual trust and respect.Several management approaches in Tribal Relations emphasize coordination and consultation with tribes in addition to other tribal related training for Forest Service employees. The management approaches state:The Coconino NF and area tribes have a mutual interest in maintaining healthy, sustainable populations of plants and other resources important for traditional and cultural purposes. Work with area tribes to identify, collaboratively manage, and monitor these resources, as well as build and maintain more detailed information about culturally important plants. Continue to manage the land in a spirit of shared stewardship with the tribes.Recognize the importance of a strong relationship with American Indian tribes and groups, and ensure Coconino NF personnel continuously cultivate those relationships. Meet regularly with consulting tribes to better understand their needs and viewpoints and consult with them in the management and interpretation of cultural sites. Enhance tribal relationships and communications through volunteer opportunities with tribal members. In addition, consider formally designating one person as a tribal relations coordinator to facilitate the tribal consultation process and maintain a record of tribal consultations.Develop memorandums of understanding (MOUs) between the forest and those consulting American Indian tribes with which an MOU does not currently exist to guide consultation processes and reflect the tribes' particular perspectives and interests.Work with neighboring forests and local tribes to develop a consistent forest products collection policy and tribal firewood program for use on the respective national forests.Provide training to forest employees about the trust responsibilities Federal agencies have for tribes and the specific ways in which the Coconino NF honors and implements those responsibilities.The Tribal Relations section also contains desired conditions and the importance of certain resources to tribal members and their access to those resources. See FW-Trbl-DC-2 and 3 and FW-Trbl-G-1 and 2.In addition to the guidance in the Tribal Relations section, the Forest Plan has language in other sections that recognize and emphasize the needs of tribal members. For example, Desired Conditions for Forest Products emphasizes the availability of products for traditional and ceremonial tribal uses. See FW-ForProd-DC-3. The Forest Products section also emphasizes recognizing the needs of members of tribes in several management approaches, which remind forest managers to:Recognize the needs of members of tribes whose historic ties include the land now administered by the Coconino NF to collect forest materials for traditional, ceremonial, and subsistence purposes.Work with tribal members to facilitate collection of forest products needed for traditional activities and ceremonial uses.A desired condition for Heritage Resources would preserve and protect historic and prehistoric sites, including American Indian sacred places and traditional cultural properties. See FW-Hrtg-DC-1. A guideline in Heritage Resources recommends management of historic and prehistoric sites to prevent or minimize adverse impacts through tribal consultation. See FW-Hrtg-G-6. Several management approaches for Heritage Resources encourage partnerships and coordination with American Indians and tribes. These management approaches remind forest managers to:Maximize opportunities for partnerships and volunteerism in all heritage program elements. Cooperate with local, State, and private agencies, institutions, and local tribes in accomplishing program goals and objectives.Work with partners such as the American Indian tribes, Arizona Site Stewards program, Arizona Archaeological Society, National Park Service, and Museum of Northern Arizona to identify, study, protect, and monitor sites.Prioritize site stabilization and restoration work based on the relative importance, information potential, tribal concerns, and uniqueness of a site. Conduct and document monitoring after sites have been stabilized. Plan and perform maintenance before it becomes critical[1] to the condition of a site.Minimize the need for onsite staffing by emphasizing "self-discovery" developments. Develop interpretative messages on individual responsibility to protect forest resources, with specific messages targeted to children. Consider tribal interests when planning interpretive projects.Cooperate with private industry,

museums, secondary schools, universities, organizations, and other Federal, State, and local governmental agencies to provide for heritage tourism that enhances the overall experience of visitors to the forest, results in preservation and protection of heritage resources and their setting, and is consistent with tribal interests and desires. Encourage partnerships with American Indians, commercial ventures, volunteers, museums, and universities for documenting, preserving, interpreting, and managing sites and to evaluate and develop creative management opportunities.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service should include in the Plan guidance for how it will address issues with tribal input and constantly changing personnel. (DEIS v2 p. 667).

Response:

The forest plan has a new management approach in Tribal Relations specific to this comment. It reads: Recognize the importance of a strong relationship with American Indian tribes and groups, and ensure Coconino NF personnel continuously cultivate those relationships. Meet regularly with consulting tribes to better understand their needs and viewpoints and consult with them in the management and interpretation of cultural sites. Enhance tribal relationships and communications through volunteer opportunities with tribal members. In addition, consider formally designating one person as a tribal relations coordinator to facilitate the tribal consultation process and maintain a record of tribal consultations. In addition, the forest plan has language in different sections that recognize and emphasize the needs of tribal members. For example, Desired Conditions for Forest Products emphasizes the availability of products for traditional and ceremonial tribal uses. See FW-FProd-DC-3. Management approaches for Forest Products emphasize recognizing the needs of members of tribes ... to collect forest materials for traditional, ceremonial, and subsistence purposes and working with tribal members to facilitate collection of forest products needed for traditional activities and ceremonial uses. Desired conditions for Heritage Resources would preserve and protect historic and prehistoric sites, including American Indian sacred places and traditional cultural properties. See FW-Hrtg-DC-1. A guideline in Heritage Resources recommends management of historic and prehistoric sites to prevent or minimize adverse impacts through tribal consultation. See FW-Hrtg-G-6. Several management approaches for Heritage Resources encourage partnerships and coordination with American Indians and tribes. Several management approaches in Tribal Relations emphasize coordination and consultation with tribes in addition to other tribal related training for Forest Service employees.

Comment:

The Fort Valley/Mt. Elden Management Area is a rare and diverse mountain resource immediately adjacent to Flagstaff – a large portion should be considered a WILDERNESS AREA; at the least it should be classified as ROS class primitive or semi-primitive non-motorized. For example: Other key mountain resources that are similar to Mt. Elden, e.g. Mt. Humphreys and Kendrick, have WILDERNESS areas in a Forest Service attempt to protect their resources. All other mountain resources are miles away from Flagstaff and not nearly as accessible. Consequently, the nearby community uses the Mt. Elden area more than other mountain areas near Flagstaff. In addition, increasingly larger populations from metropolitan cities of Arizona flock to Mt. Elden to get away from the increasingly hot desert climate in surrounding Arizona. Phoenix's population growth is projected to increase at a rate three times greater than the rest of the U.S. Mt. Elden's recreational use is also increasing beyond environmental capacity due to Flagstaff's increasing population, especially due to the growing population of NAU students (projected NAU growth by 2015 = 25,000 local students). These combined factors place Mt. Elden in environmental danger and actions must be taken to preserve and sustain this precious mountain resource.

Response:

The Mount Elden area was considered for wilderness designation as part of the wilderness evaluation process the Forest conducted for the forest plan revision effort. The Mount Elden area was screened out during the inventory step of the evaluation. After boundary adjustments were made for private land, communication towers, Forest Service lookout tower, utility corridors, other special use permits, and associated roads, the area no longer met the 5,000 acre criteria for potential wilderness areas. It was removed from further consideration at that time. The Mount Elden Management Area has not been assigned Recreation Opportunity Spectrum (ROS) settings of primitive or semi-primitive non-motorized as suggested. The ROS settings for alternatives B, C and D were mapped using a raster-based GIS approach which incorporated and elaborated on agency protocols established in 2003. Through the use of map algebra, naturalness, access, remoteness, facilities and site management were incorporated to identify the spatial arrangement of recreational opportunities and ROS classes throughout the Forest. The results of this modeling reflect that less than 10 percent of the management area should have an ROS class of semi-primitive non-motorized and none of the management area should have an ROS class of primitive. There is no sound rationale to adopt the commenters suggestion and to do so would create a situation where many existing uses in the area are inconsistent with the ROS class for the area.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service seems to be stating that projects on and around the San Francisco Peaks must meet these certain criteria, yet they have allowed expansion of a project which violates these statements and actually permanently altered the landscape and animal habitat by cutting and clearing 75 acres of trees, also significantly altering a significant sacred religious traditional cultural place. The Forest Service needs to amend the Plan language to not allow this to happen in the future. If an area is highly valued for its unique scenic beauty and cultural significance, it should be protected and preserved absolutely. Projects that alter and threaten aspects of such an area should simply not be allowed and the Forest Service needs to address this so it does not continue or happen again in the future.

Response:

Future projects and activities, of any kind, must be consistent with the Forest Plan and various laws, agency policy, and direction. See the Guiding Future Projects, Program Plans, and Assessments section in chapter 1 of the Forest Plan. The Forest Plan provides forestwide direction on forest resources (see chapter 2 of the Forest Plan). Forestwide direction on scenic beauty is located in the Scenic Resources section. Forestwide direction on areas with cultural significance is found in the Heritage Resources section. The Forest Plan provides additional guidance for the San Francisco Peaks Management Area (see chapter 3 of the Forest Plan). The management area direction includes desired conditions for scenery and heritage resources. See MA-Peaks-DC-5 and 1. All of these plan components will regulate future activities on Forest. Forestwide Direction for Recreation Special Uses (such as for the Snowbowl Ski Area) are found in the section on Special Uses. Administration of existing special use permits are handled at the district level. Past decisions are outside the scope of the plan.

Commenter: Gitlin, Alicyn

Comment:

The Volcanic Woodlands Management Area is valued for its scenery, yet designated motorized recreation activities can impact the scenery where they occur (See Figures 1-4). However, there are no standards or guidelines for protecting the sensitive soils and viewsheds of these areas within the Draft Plan.[...]The only Management Approaches are to coordinate with NPS and tribes. The Forest Service should create standards, guidelines, and management approaches to protect the fragile soils and viewsheds of Volcanic Woodlands.

Response:

The Volcanic Woodlands Management Area direction has been reviewed and expanded in response to this comment and as part of a comprehensive effort to provide consistency on the level of information and direction included in each management area. In general, management of soils and viewsheds is addressed through forestwide direction located in the Soil and Scenic Resources sections of the Forest Plan. For example, soil function and productivity is addressed in several forestwide desired conditions in the Soil section. See FW-Soil-DC-1, 2, and 3. Management approaches in the Soil section remind forest managers to: Use published terrestrial ecosystem survey information: (1) for broad resource and forestwide assessments and land management and project planning at regional, forest, and district levels; (2) as the basis for determining project goals and objectives, desired ecological conditions, and for predicting effects and impacts of the different management prescriptions and activities upon each terrestrial ecosystem; and (3) for the initial selection of areas for proposed projects. Conduct onsite soil investigations and refine mapping for soil disturbing projects that require site-specific, precise, highly detailed soil information, which is beyond the scale of the terrestrial ecosystem survey. Analyze or collect site-specific terrestrial ecosystem survey information as needed to accurately determine limitations, suitability, and productivity potentials of the different terrestrial ecosystems that occur. Scenic values and scenic integrity are also addressed in several forestwide desired conditions. For examples, see FW-Scenic-DC-1 and 2. The Landscape Character Description document referenced in FW-Scenic-DC-2 includes a section on the Volcanic Woodlands Landscape Character Zone. In addition to the forestwide direction on scenic resources, the expanded Volcanic Woodlands Management Area includes a desired condition for large tracts of unroaded landscape in Deadman Wash. See MA-VolcanWd-DC-4. It also includes a reference to the scenery desired conditions included in the Volcanic Woodlands Landscape Character Zone. See MA-VolcanWd-DC-5.

Commenter: Gitlin, Alicyn

Comment:

We request the forest plan fully safeguard air quality at levels that meet or exceed federal, state, or local air quality standards, and fulfill its related duties to safeguard wilderness values and other air quality-related values.

Response:

The Forest Plan includes components that tier to and require the Forest to meet all air quality regulations and legal requirements. See FW-Air-DC-1 and FW-Air-G-1. The Air Quality section in the Forest Plan also includes several management approaches regarding coordination with the Arizona Department of Environmental Quality regarding impacts to air quality from prescribed burns and wildfires. They state: Coordinate with ADEQ during prescribed burns to comply with State and Federal regulatory requirements for emissions and impacts to Class I areas. Coordinate with ADEQ during wildfires to ensure ADEQ is aware of potential smoke impacts to receptors. In addition, smoke sensitive areas should be identified and management objectives and courses of action should be developed to mitigate impacts to those areas. Smoke sensitive areas are areas in which smoke from outside sources is intolerable for reasons such as heavy population, existing air pollution, or intensive recreation or tourist use. See FW-Air-G-2. An additional management approach was added to consider design features, best management practices, or mitigation measures to reduce fugitive dust where needed.

Commenter: Gitlin, Alicyn

Comment:

The DEIS does recognize fugitive dust is a source of PM10 and that the Forest system of roads is a contributor to fugitive dust. The DEIS discloses that the Coconino soils have very high wind erodibility factors but relies on unroaded wilderness areas to mitigate the generation of fugitive dust from roads. The Draft Land and Resource Management Plan for the Coconino and DEIS should be changed to address significant sources of fugitive dust and include standards and additional guidelines for activities that generate PM10.

Response:

As your comment suggests, the Forest recognizes fugitive dust as a source of PM10, which is subject to State and Federal air quality standards. The revised Plan has a desired condition for the air quality on the Forest to meet State and Federal air quality standards. See FW-Air-DC-1. Specific actions relating to fugitive dust will be identified at the project level based on the activity being considered and the potential for fugitive dust. As a reminder to consider fugitive dust during project development, a management approach has been added to the Air Quality section, which states: Project activities should implement design features, best management practices (BMPs), or mitigation measures to reduce fugitive dust where needed. In addition, a soil guideline would require project-specific design features be used on particularly vulnerable soils to avoid or minimize soil impacts. These soils include those on steep slopes, those with moderate or severe erosion hazard, and those that are sensitive to degradation when disturbed. See FW-Soil-G-3. Desired conditions for soil promote soil with the ability to resist erosion and the maintenance of vegetative ground cover at levels that contribute to soil stability and prevent erosion for exceeding natural rates of soil formation within their inherent capability. See FW-Soil-DC-1 and 2.

Commenter: Gitlin, Alicyn

Comment:

The Draft Land and Resource Management Plan for the Coconino and DEIS do not include any standards for air quality just two guidelines. (Draft Plan, p. 16). Further the Draft Land and Resource Management Plan for the Coconino and DEIS ignore air quality impact from several management activities that are large contributors. Those activities not considered are livestock grazing and motorized recreation.

Response:

The Forest Plan includes components that tier to and require the Forest to meet all air quality regulations and legal requirements. See FW-Air-DC-1 and FW-Air-G-1. The Air Quality section in the Forest Plan also includes several management approaches regarding coordination with the Arizona Department of Environmental Quality regarding impacts to air quality from prescribed burns and wildfires. They state: Coordinate with ADEQ during prescribed burns to comply with State and Federal regulatory requirements for emissions and impacts to Class I areas. Coordinate with ADEQ during wildfires to ensure ADEQ is aware of potential smoke impacts to receptors. In addition, smoke sensitive areas should be identified and management objectives and courses of action should be developed to mitigate impacts to those areas. Smoke sensitive areas are areas in which smoke from outside sources is intolerable for reasons such as heavy population, existing air pollution, or intensive recreation or tourist use. See FW-Air-G-2. An additional management approach was added to consider design features, best management practices, or mitigation measures to reduce fugitive dust where needed.

Comment:

Please explain how the following policy will protect gatherers in cases where botanical product locations must be kept secret from outsiders: FW-FProd-DC-4: Collection of forest botanical products is authorized by permit and only when information is available to ensure the product will persist on the forest. Collection of plant species recognized as rare, limited in distribution, threatened, endangered, or sensitive is discouraged except for scientific and cultural purposes. Traditional tribal uses for forest botanical products, such as the collection of medicinal plants, wild plant foods, basketry materials, and firewood, are facilitated. Boughs and herbaceous plant parts used for American Indian traditional and ceremonial purposes are available under conditions and procedures that minimize restrictions and are consistent with laws, regulations, and agreements with tribes. (DEIS v3, p. 851)

Response:

The Forest Plan has been adjusted in response to this comment. The desired condition that discussed the need for a permit to collect, the collection of rare plants, and the collection of forest products by tribes has been broken up to reflect these three topics. The suggestion that any collection would need to be authorized by a permit has been dropped from the plan. Collection of forest botanical products is covered by 36 CFR 223 subpart H and FSH 2409.18, Chapter 80, Uses of Timber Other Than Commercial Timber Sales, Special Forest Products - Forest Botanical Products. Because collection of botanical products for personal use is covered by regulation (36 CFR 223 subpart H) and a permit is not always required, the reference to a permit has been removed. However, the Forest Plan does provide direction on commercial plant collection activities, which are not permitted in the Red Rock, Oak Creek Canyon, Sedona Neighborwoods MA's. Removal of commercial national forest products is by permit at designated locations only in the Red Rock MA, House Mountain-Lowlands, Sedona Neighborwoods Management Area. See MA-RedRock-S-6, MA-OakCrk-S-1, 3, MA-HouseMtn-S-1, and MA-SedN-S-1, 3. While a permit may not be necessary in all situations, a guideline has been added to ensure that the collection of species that are rare, limited in distribution, or on the Southwestern Region's sensitive species list should not be authorized unless the species can withstand collection and will persist on the Forest is addressed in a guideline. See FW-FProd-G-4. The remaining direction relating to the collection of forest products by tribes has been retained as a desired condition. See FW-FProd-DC-3. In addition to the adjusted desired condition, several management approaches have been added to the Forest Products section to remind forest managers to: Recognize the needs of members of tribes whose historic ties include the land now administered by the Coconino NF to collect forest materials for traditional, ceremonial, and subsistence purposes. Work with tribal members to facilitate collection of forest products needed for traditional activities and ceremonial uses. All of these changes help ensure that forest product collection locations will remain secret.

Commenter: Gitlin, Alicyn

Comment:

The Forest Service tells us, “While plan alternatives would provide protection of sacred sites from other types of forest uses in a primarily strategic manner, they would not necessarily prohibit site-specific decisions that tribes could have objections to.” (DEIS v2, pp. 669) Why is this? If the Forest Service is aware that this is a problem, they must create standards and guidelines for how to remedy this situation.

Response:

The Coconino NF follows law, policy, guidance, and directives on communication and notification to tribes. These include the following, which have been added to Appendix D in the plan - Other Sources of Information: American Indian Religious Freedom Act (16 U.S.C. 1996), Archeological Resources Protection Act of 1979 (16 U.S.C. 470 aa-mm), National Historic Preservation Act (16 U.S.C. 470 et seq.) and regulations implementing Section 106 (36 CFR Part 800), , Native American Graves Protection and Repatriation Act (25 U.S.C. 3001, et. seq. and 43 CFR 10), National Environmental Policy Act Implementing Regulations (40 CFR Part 1501.2(d)(2)), Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2000), Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Feb. 11, 1994), Forest Service Manual 1560 and Forest Service Handbook 1509.13. Consultation with tribes and the importance of incorporating their perspectives, concerns, and traditional knowledge into management decisions is discussed in Tribal Relations and Uses section of the Forest Plan. For example, the Forest Plan acknowledges the special and unique government-to-government relationship (i.e., one sovereign nation to another) based on the U.S. Constitution, treaties, and statutes. See General Description and Background for the Tribal Relations and Uses section. Rather than attempt to unilaterally create a particular process to resolve disagreements with tribes through a plan component, the Forest Plan includes a management approach in the Tribal Relations and Uses section that suggests developing MOUs with tribes. It reminds forest managers to: Develop memorandums of understanding (MOUs) between the forest and those consulting American Indian tribes with which an MOU does not currently exist to guide consultation processes and reflect the tribes’ particular perspectives and interests.

Comment:

The Forest Service should explain how simple consultation can improve relations. Consultation does not seem to offer the tribes the ability to simply say “no!” Again, the Forest Service must provide a way for tribes to actually have a voice and their objections seriously considered. Perhaps tribes and tribal members could be given the opportunity to vote on these issues that come up. The tribes have been in existence longer than the Forest Service. There must be a better way to acknowledge their opinions and advice. (DEIS v2 pp. 667-9).

Response:

The Coconino NF follows law, policy, guidance, and directives on communication and notification to tribes. These include the following, which have been added to Appendix D in the plan - Other Sources of Information: American Indian Religious Freedom Act (16 U.S.C. 1996), Archeological Resources Protection Act of 1979 (16 U.S.C. 470 aa-mm), National Historic Preservation Act (16 U.S.C. 470 et seq.) and regulations implementing Section 106 (36 CFR Part 800), , Native American Graves Protection and Repatriation Act (25 U.S.C. 3001, et. seq. and 43 CFR 10), National Environmental Policy Act Implementing Regulations (40 CFR Part 1501.2(d)(2)), Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2000), Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Feb. 11, 1994), Forest Service Manual 1560 and Forest Service Handbook 1509.13. Consultation with tribes and the importance of incorporating their perspectives, concerns, and traditional knowledge into management decisions is discussed in Tribal Relations and Uses section of the Forest Plan. For example, the Forest Plan acknowledges the special and unique government-to-government relationship (i.e., one sovereign nation to another) based on the U.S. Constitution, treaties, and statutes. See General Description and Background for the Tribal Relations and Uses section. Rather than attempt to unilaterally create a particular process to resolve disagreements with tribes through a plan component, the Forest Plan includes a management approach in the Tribal Relations and Uses section that suggests developing MOUs with tribes. It reminds forest managers to: Develop memorandums of understanding (MOUs) between the forest and those consulting American Indian tribes with which an MOU does not currently exist to guide consultation processes and reflect the tribes’ particular perspectives and interests.

Comment:

Mt. Elden is a rare mountain environment with a higher degree of natural diversity than the nearby San Francisco Peaks. Mt. Elden is immediately adjacent to Flagstaff and is currently environmentally threatened due to recreational pressure. As stated in the Draft Plan numerous times (e.g. see Chapter 1 of Draft Plan) - this forest is subject to significant impacts from climate change, increasing population growth, increasing recreational demand, increasing recreational conflicts, new types of recreation demands, and increasing pressure on forest resources. Mount Elden supports diverse vegetation communities adapted to differing temperature and moisture regimes, and these habitat types support carnivores and their prey, large mammals such as mountain lions, deer winter habitat, as well as a variety of bird species. There are also archaeological resources, which are being damaged by recreational users including downhill bicycling (B. Poturalski, pers. comm.). Yet, there is no mention of Mount Elden's ecological and archaeological resources in the description given in the Draft Plan – the area is instead treated as a recreational playground. The Forest Service must add a description of ecological and archaeological resources of the Fort Valley/Mount Elden Management Area. Damage to resources from recreation is currently occurring (see Figures 1-5). The Forest Service must add Desired Conditions, Guidelines, Standards, and Management Approaches to protect Forest resources in the Fort Valley/Mount Elden Management Area from damage caused by recreation.

Response:

The General Description and Background section for the Mount Elden Management Area in the revised Plan has been adjusted in response to this comment. Additional information on the ecological and archaeological resources in this management area have been added to the General Description and Background section.

Commenter: Greco, Bruce

Comment:

As stated above there appears to be disconnect between the monitoring strategies associated with the 4FRI document and this planning document. This is a concern as the vegetation treatments covered in 4FRI will be the dominate treatments affecting the implementation of the forest plan desired conditions for possibly the next ten years. Based on that premise, there should be consistency as to what and how components are being monitored.

Response:

Forest plan revision and the Four Forest Restoration Initiative (4FRI) are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The first 4FRI EIS and decision provided guidance for on-the-ground implementation. The 1987 Forest Plan (as amended) provided a framework for projects under the first 4FRI EIS which covered portions of the Coconino and Kaibab National Forests. The revised Forest Plan provides a framework for the projects being proposed under the second 4FRI EIS, the Rim Country project, which is planned to occur on portions of the Coconino, Apache-Sitgreaves, and Tonto National Forests. For example, the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units will guide the projects designed under the Rim Country EIS and decision. The specific restoration activities are developed and evaluated in separate analysis through this project-level decisionmaking. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Monitoring and evaluation is required by the 1982 Planning Rule provisions to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. The plan revision team and 4FRI team have reviewed each other's monitoring plans. Efforts were made to align monitoring questions when possible under the first EIS and efforts will be made to align monitoring questions under the second 4FRI EIS. The results from 4FRI monitoring is expected to inform monitoring for the Forest Plan. For example, the 4FRI monitoring question concerning maintenance or promotion of long-term soil productivity in accordance with design features, best management practices, and mitigation measures would inform the Forest Plan monitoring question: How much have implemented projects and soil best management practices contributed to protecting soil, reducing accelerated erosion, reducing soil compaction, and maintaining soil and nutrient cycling thus maintaining long term soil productivity?

Commenter: Greco, Bruce

Comment:

Need for consistency in data and statements from section to section. a. Different sections of the Plan speak to similar subject matter, but there is sometimes inconsistency between sections. i. Example; in the vegetation section (all types) there is a discussion of the vegetation desired conditions with the objective being; this is what we want to accomplish. Later in the ponderosa pine vegetation section there is an objective of moving 6th code watersheds to satisfactory conditions. However there is no discussion of this objective in the overall vegetation section. Furthermore there is no description of how the desired conditions of the vegetation relate to the satisfactory conditions of the 6th code watersheds.

Response:

A comprehensive review of the Forest Plan has been conducted to improve the consistency of direction on similar subject matter in different sections. One approach was to combine the repetitive direction into one component. If the component was addressing a resource that could be impacted by a variety of actions, the direction was placed in the section designated for the resources. In the few situations when component was repeated in more than one location in the Forest Plan, the plan components were made consistent.

Commenter: Greco, Bruce

Comment:

There is a need to provide clarification on fire and its role in ecological processes. a. The fire discussion should include all aspects of fire management; suppression, use of wildfire, and use of prescribe fire, as it relates to meeting desired conditions and facilitating properly functioning ecological systems. The descriptions of how fire will be integrated into all of the sections where it will be a part of the strategies to accomplish the desired conditions. For example in the ponderosa pine section there is no mention of the need to re-establish fire in fire adaptive ecosystems, and no link to the fire section on how fire management will be utilized.

Response:

There are numerous places in the plan that address fire and its role in the ecological process, especially for fire-adapted ecosystems: FW-Eco-DC-1, FW-TerrERU-All-DC-2 and G-2, FW-TerrERU-Grass-DC-2, FW-TerrERU-IC-DC-3, FW-TerrERU-PJ-DC-3, 8, 13, and 14, FW-TerrERU-AspMpl-DC-2, FW-TerrERU-PP-DC-3 and 11, FW-TerrERU-MC-MCFF-5 and 8, FW-TerrERU-MC-MCA-DC-4 and 7, and FW-TerrERU-SF-4, 5, and 8. In addition a management approach in All Terrestrial ERUs reminds managers that: Fire is essential for ecosystem function and for maintaining or moving towards desired conditions in ecosystems where fire is the primary natural disturbance. Primary natural disturbances in Desert Communities, Alpine Tundra, and riparian areas do not include fire, but rather include flooding, precipitation, temperature, wind, avalanches, and ultraviolet radiation. When used as a tool, fire can effectively restore forest structure when used alone or when combined with mechanical treatments. Mechanical treatments may be costly, so the capacity to implement such treatments across the landscape may be limited. Strategic placement and design of mechanical treatments increases their effectiveness in protecting values at risk.

Commenter: Greco, Bruce

Comment:

Almost all of the scales are listed at the 'Forest' classification when there are likely multiple scales where data could be processed and the monitoring questions could be answered.

Response:

While the various reporting databases referred to in the comment could provide information at multiple scales, most of the questions in the Monitoring Plan are designed to answer the following questions: What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? What modifications are needed to account for unanticipated changes in conditions? In addition to annual monitoring, the forest supervisor reviews the conditions on the land covered by the plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the forest supervisor may amend the plan at any time. All of the monitoring and evaluation timeframes identified in this chapter begin from the date of the record of decision. Consequently, the monitoring questions are looking for information aggregated to a landscape scale. Project level activities will develop monitoring appropriate to the project and resources that are potentially impacted. This project level monitoring information feeds into many of the data sources that the Monitoring Plan will use to answer the monitoring questions. Note that monitoring questions one and two on air quality and visibility are focused on areas greater than the forest scale.

Commenter: Greco, Bruce

Comment:

The possible monitoring methods often include acronyms like FACTS and INFRA, but there is no link to definitions of what these are and information on how they would be utilized to answer the questions.

Response:

The Monitoring Strategy and Plan in the Forest Plan have been reviewed and modified in response to this concern. Key changes include clarifying the questions, identifying the scale, having more easily understood metrics that tie to the data sources for each monitoring question. Acronyms were spelled out in place and a footnote was added to provide additional information on the data sources that would be used by the Monitoring Plan.

Commenter: Greco, Bruce

Comment:

Without identified indicators (and associated metrics) it is difficult to understand how the monitoring questions will be answered. Without that information the reader does not know what the cause and effect linkages are and how they will be associated with the attainment of the desired conditions.

Response:

The Monitoring Strategy and Plan in the Forest Plan have been reviewed and modified in response to this concern. Key changes include clarifying the questions, identifying the scale, having more easily understood metrics that tie to the data sources for each monitoring question. Acronyms were spelled out in place and a footnote was added to provide additional information on the data sources that would be used by the Monitoring Plan.

Commenter: Greco, Bruce

Comment:

The Monitoring Strategy is lacking in specifics. a. The monitoring plan is composed of broad questions and lacks any specific metrics/indicators as required by the new planning rule. See 36 CFR 219.12(2) & 219.12 (5), which references 'monitoring questions and associated indicators'. "Each plan monitoring program must contain one or more monitoring questions and associated indicators...."

Response:

The Monitoring Strategy and Plan in the Forest Plan have been reviewed and modified in response to this concern. Key changes include clarifying the questions, identifying the scale, having more easily understood metrics that tie to the data sources for each monitoring question. Acronyms were spelled out in place and a footnote was added to provide additional information on the data sources that would be used by the Monitoring Plan.

Commenter: Greco, Bruce

Comment:

There appears to be some disconnect between the planning and environmental analysis work that is being done with the Four Forest Restoration Initiative (4FRI) and the work being done for the Forest Plan. a. The ERI recommends that a general comparative review be done between these two documents. This is especially important since the 4FRI project will set forest treatment direction for a large part of the forest for an additional eight to fifteen year period. Areas to evaluate are; the monitoring needs, desired conditions, and proposed vegetation treatments.

Response:

Forest plan revision and the Four Forest Restoration Initiative (4FRI) are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The first 4FRI EIS and decision provided guidance for on-the-ground implementation. The 1987 Forest Plan (as amended) provided a framework for projects under the first 4FRI EIS which covered portions of the Coconino and Kaibab National Forests. The revised Forest Plan provides a framework for the projects being proposed under the second 4FRI EIS, the Rim Country project, which is planned to occur on portions of the Coconino, Apache-Sitgreaves, and Tonto National Forests. For example, the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units will guide the projects designed under the Rim Country EIS and decision. The specific restoration activities are developed and evaluated in separate analysis through this project-level decisionmaking. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Monitoring and evaluation is required by the 1982 Planning Rule provisions to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. The plan revision team and 4FRI team have reviewed each other's monitoring plans. Efforts were made to align monitoring questions when possible under the first EIS and efforts will be made to align monitoring questions under the second 4FRI EIS. The results from 4FRI monitoring is expected to inform monitoring for the Forest Plan. For example, the 4FRI monitoring question concerning maintenance or promotion of long-term soil productivity in accordance with design features, best management practices, and mitigation measures would inform the Forest Plan monitoring question: How much have implemented projects and soil best management practices contributed to protecting soil, reducing accelerated erosion, reducing soil compaction, and maintaining soil and nutrient cycling thus maintaining long term soil productivity?

Commenter: Greco, Bruce

Comment:

These sections need more information on restoration objectives: see FSM 2020.3 - Policy #2. Establish ecological restoration goals and objectives in strategic plans.

Response:

No change has been made to the Forest Plan in response to this comment. The objectives included in the Forest Plan were developed to be realistic and to be implementable within anticipated future budgets (expected to be similar to current budgets). The Plan Content section in Chapter 1 of the Forest Plan acknowledges that objectives to achieve desired conditions are strongly influenced by recent trends, past experiences, and anticipated staffing levels and short term budgets. Forest restoration activities are not limited to those listed in the objectives so other restoration actions can be undertaken as opportunities arise.

Commenter: Greco, Bruce

Comment:

The vegetation sections (ponderosa pine) need to have additional information and associated reference material, to capture the key ecological components of the specific vegetation types that are described. a. This should include an expanded discussion of the historical range of variation (HRV) and the potential natural vegetation type (PNVT), as well as the current conditions. This information will provide a broader context for the reader to understand management needs and the desired conditions. Good reference materials are GTR-310, the Historical Range of Variation, and State and Transition Modeling of Historic and Current Landscape Conditions for Potential Natural Vegetation Types of the Southwest, paper by The Nature Conservancy, and Kaibab National Forest Plan.

Response:

The desired conditions for the Ponderosa Pine ERU (formerly the Ponderosa Pine Potential Natural Vegetation Type) were developed using information from the Historical Range of Variation, and State and Transition Modeling of Historic and Current Landscape Conditions for Potential Natural Vegetation Types of the Southwest (GTR-310), which is included in the References section of the Forest Plan. This reference was used when the desired conditions for the Ponderosa Pine ERU were developed for the Southwestern Region. As this reference's title suggests, it addresses the historic range of variation of vegetation types in the Southwest. An example of the historic range of variation included in GTR-310 that has been incorporated into the Forest Plan can be found in the Ponderosa Pine ERU desired condition that allows for openings that typically range from 10 percent in more productive sites to 70 percent in the less productive sites. See FW-TerrERU-PP-DC-4.

Commenter: Greco, Bruce

Comment:

It would be good to include some citations or references. i. Example: Some of the desired condition statements are directly tied to information in General Technical Report RMRS-GTR-310, but it is not referenced.

Response:

In general, plan components do not contain in text citations. General Technical Report RMRS-GTR-310 has been added to the References section of the revised Plan.

Commenter: Greco, Bruce

Comment:

Need to provide more clarification of some statements. a. There are factual statements in the document that do not contain enough information to fully articulate the context of the statement. i. Example: The desired condition statement - "Endemic rare plant communities are intact and functioning." does not, without additional information, allow the reader to know what is meant by "intact" and "functioning", as it relates to meeting desired conditions.

Response:

The Forest Plan has been reviewed and whenever possible additional specificity has been added to the desired conditions. For example, the specific component being commented on has been merged with another component in the Wildlife, Fish, and Plants section to provide better context for these terms. See FW-WFP-DC-5.

Commenter: Greco, Bruce

Comment:

Need for consistency in use of terms. a. Different sections of the Plan contain different terms that are used interchangeably. i. Example; sometimes the term 'openings' is used interchangeably with the term 'interspace' and other times it is use to describe forest openings like meadows and grasslands.

Response:

The Forest Plan has been reviewed and adjusted to ensure consistent usage of terms throughout the document. Particular attention was paid to the use of "openings" and "interspaces." To further clarify the meaning and use of these terms, a definition for "interspaces" has been added to the Glossary in the Forest Plan and the definition for "openings" has been adjusted.

Commenter: Greco, Bruce

Comment:

The ERI has also reviewed the Kaibab NF revised plan including monitoring plan and recommend that several of the issues above can be addressed by incorporated the innovations included in the Kaibab NF plan. In particular, we recommend the Coconino monitoring plan incorporate the use of clear metrics and methods of data collection to address questions that are specific to the resource and include directional trends.

Response:

The Monitoring Strategy and Plan in the Forest Plan have been reviewed and modified in response to this concern. Key changes include clarifying the questions, identifying the scale, having more easily understood metrics that tie to the data sources for each monitoring question. Acronyms were spelled out in place and a footnote was added to provide additional information on the data sources that would be used by the Monitoring Plan.

Commenter: Greco, Bruce

Comment:

The document should have a link with definitions for terms (see Kaibab Forest Plan) and terms like 'interspace' should be used consistently.

Response:

All words included in the glossary for the revised Plan have been hyperlinked on their first occurrence in the document. Definitions for "interspaces" and "openings" have been added to the glossary. The revised Plan has been edited to use those terms in their proper context.

Comment:

more wilderness areas are not needed. The number of people seeking wilderness experiences are limited and the areas provided are adequate. In addition, the undesignated national forest has huge areas where people can have the wilderness experience.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Guerrette, Andrea

Comment:

People who enjoy motorized activities have very limited areas in which to participate. It appears that motorized vehicle use is allowed in very limited areas in Oak Creek Canyon and Long Valley. Cinder Hills OHV area is the only designated OHV riding area for off-road driving that I can see. Other areas should be provided for them in the southern and central part of the Coconino National Forest.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not designate specific areas for off-road motorized recreation. Specific motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Specific recreation planning efforts will use the framework set by the Forest Plan (such as desired conditions, standards, guidelines, and suitability determinations) and will consider potential resource impacts, access needs, public input, and alternative views.

Commenter: Haman, Reana

Comment:

I would like to see more enforcement against littering on public lands. Increase the fees/fines to pay for enforcement and use volunteers too.

Response:

No change to the plan has been made in response to this comment. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect. The revised Plan does acknowledge the concern with litter on the Forest in several plan components. See FW-Rec-All-DC-5, FW-Rec-Disp-DC-3, and FW-Rec-All-G-2. These plan components would guide site-specific considerations regarding litter.

Commenter: Hammond, Stephanie

Comment:

WE HIKE AND BIKE AND ENJOY THE WILDERNESS IN SEDONA AND RED ROCK COUNTRY ON A WEEKLY BASIS AND WANT TO KEEP ALL PROTECTIONS IN PLACE FOR NATIVE SPECIES.

Response:

In addition to existing law, regulation, and policy related to the protection of natives species, the Forest Plan provides a comprehensive framework for the protection of native species. For examples , see FW-Eco-DC-1 and 4, FW-Water-DC-6, FW-Water-G-6, FW-Rip-Strm-G-1, FW-Rip-Wtlns-DC-1 and 2, FW-Rip-Spr-DC-2, FW-Rip-Spr-G-3, FW-Rip-RipType-DC-2 and 6, FW-Rip-RipType-G-2, FW-TerrERU-All-G-3, FW-TerrERU-DC-DC-2 and 4, FW-TerrERU-Grass-DC-1 and 2, FW-TerrERU-IC-DC-1, 2, and 3, FW-TerrERU-DC-3, 4 and 9, FW-TerrERU-AspMpl-DC-1, FW-TerrERU-MC-All-DC-2, FW-TerrERU-MC-MCA-DC-1, FW-TerrERU-SF-DC-1, FW-TerrERU-AT-DC-1 and 2, FW-TerrERU-G-1, FW-WFP-DC-1, 2, 3, 4, 9, and 10, FW-WFP-G-3, FW-Invas-DC-1, FW-Invas-G-1 and 2, FW-Graz-G-7, FW-RdsFac-G-9, FW-Rec-Dev-G-2, and FW-Scenic-DC-1.

Commenter: headington, patrick

Comment:

I do not believe any one plan alternative meets all the needs Coconino NF or users of the forest. The ideal plan would incorporate all of the following, A) provide direction for the Forest Service to meet required management and restoration goals, B) provide responsible recreation opportunities for outdoor enthusiasts, hunters and anglers, C) promote and encourage sustainable conservation efforts for unique habitats, D) provide mechanisms for responsible restoration and maintenance of all habitats within the Coconino NF. I cannot support alternatives or plans that include: A) the creation or designation of new Wilderness Areas, nor the management of any area using current Wilderness Area policy, B) additional restrictions on motorized access, motorized or mechanical equipment, dispersed camping, C) installation, construction or placement of renewable energy generation or collection systems or components on Coconino NF lands.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Heath, Sean

Comment:

P.98, Desired Conditions for Special Uses, 1st paragraph, last sentence - Suggest using the following citation as a reference: Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA.

Response:

This sentence has been merged similar direction in one of the special uses guidelines. To provide for broader application, it has been adjusted to refer to "wildlife" instead of "raptors." See FW-SpecUse-G-5. A full reference to Avian Power Line Interaction Committee (APLIC) has been added to the Special Uses section in Appendix D, Other Sources of Information. This reference is also located in the Wildlife, Fish, and Plant section in Appendix D.

Commenter: Heath, Sean

Comment:

P. 99, Guidelines for Special Uses, 1st paragraph - The guidelines state “In accordance with the scenery desired conditions and landscape character, utility rights-of-way should be located and maintained to conform with natural-appearing patterns of native vegetation.” This may not always be possible. A ROW cleared of trees surrounded by a forest will not appear natural. Western Area Power Administration must comply with National Electric Reliability Code (NERC) Reliability Standard FAC-003-01 (after July 1, 2014, FAC-003-03) that deals with maintaining transmission lines in a safe and reliable operating condition along with various aspects of the planning and operation of the power system, including vegetation management.

Response:

This guideline has been adjusted to address the concerns in this comment. Recognizing that complete conformity with natural-appearing patterns of native vegetation is not always possible, the guideline now requires structures to be designed to reduce the contrast with desired landscape character. See FW-SpecUse-G-7.

Commenter: Heath, Sean

Comment:

Desired Conditions for Special Uses, 2nd paragraph - Is the desire to bury utility lines only for new lines? It is not technically or monetarily feasible to bury existing Western lines and the environmental impact of such an undertaking would not be beneficial.

Response:

Several plan components have been modified to address these concerns. This desired condition in the forestwide Special Uses section that addresses the impacts of utility and energy transmission corridors on the forest has been modified to address this concern and clarify its overall intent. Some commenters expressed concern with what appeared to be a general requirement to bury all infrastructure within these corridors, which can raise economic and environmental concerns. Other commenters expressed support for burying all infrastructure in these corridors and asked that vegetation clearing for these corridors be kept to a minimum. After considering all of these comments, the desired condition was adjusted to make it clear that its goal is for this type of infrastructure to not be visible across the landscape, rather than defaulting to burying it. The desired condition has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this type of infrastructure. See FW-SpecUse-DC-3. The corresponding guideline in the Special Uses section that addresses burial of utility lines has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this utility lines. See FW-SpecUse-G-9. With regard to vegetation management, a Special Use desired condition was adjusted to acknowledge that there are legal mandates associated with the vegetation clearing for these corridors and it is a desired condition to meet those legal mandates. See FW-SpecUse-DC-2. While this desired condition recognizes that there is a level of vegetation clearing that is necessary for the safe operation of these corridors, it also recognizes the desire of moving towards other desired conditions applicable to the area. This includes the desired conditions for scenery. To support this desired condition, the forestwide Special Uses section has retained a guideline that requires the retention of vegetation that does not need to be cleared to meet legal mandates to allow screening for scenery, habitat for species, and corridors for wildlife movement. See FW-SpcUse-G-6. Concerns about co-locating infrastructure in an existing corridor before a new corridor is considered were addressed in several plan components in the forestwide Special Uses and Scenery sections. To consolidate this direction in one plan component, the guideline in the forestwide Scenery section that was designed to prevent the widening of utility rights-of-way in areas that have a moderate scenic integrity objective was merged with a similar direction in the forestwide Special Uses section. See FW-SpecUse-DC-3. Whether the additional infrastructure should be buried is addressed by the plan components discussed above.

Commenter: Heath, Sean

Comment:

In addition to the same comments on the SIO encroachment on power lines in Alternative B, the Hackberry and Davey's PWAs extend into existing power line ROWs. The powerlines precede in date the creation of both PWA's so the boundaries for these Proposed Wilderness Areas should be outside the existing t-line 300-foot ROW and for the additional 60 feet on either side of the ROW, mechanized treatments of vegetation should still be allowed.

Response:

The boundaries on the Strawberry Crater, Davey's, and Hackberry potential wilderness areas (PWAs) have been adjusted to ensure that they do not overlap the rights-of-way for these existing power lines. The boundary adjustments were very small and did not affect the evaluations of these PWAs. The Strawberry Crater PWA was reduced from 6,611 acres to 6,579 acres. The Davey's PWA was reduced from 1,779 acres to 1,739 acres. The Hackberry PWA was reduced from 26,044 acres to 25,836 acres.

Commenter: Heath, Sean

Comment:

Western is asking that the Coconino provide management prescriptions for electric power facilities and include provisions that will allow possible upgrades of existing facilities, construction of new facilities, and continuous access to conduct operation and maintenance activities on these facilities.

Response:

The Forest Plan does not make decisions that would allow specific upgrades to existing facilities, construction of new facilities, or access to these facilities. Decisions on requests such as those can only be made after consideration and analysis of site-specific proposals. The Forest Plan does include plan components related to electric power facilities and other special uses in the Special Uses sections. This section contains desired conditions, guidelines, and management approaches related to the management of electric power facilities located on the forest. For examples, see FW-SpecUse-DC-2, 3, and 5, FW-SpecUse-G-5, 6, 7, 8, and 9, and several management approaches in the Special Uses section, which remind forest managers to: Encourage proponents to involve the forest early in the special use permit proposal development process. Consider processing right-of-way grants by priority; first priority being the public interest and national forest needs. Since some utility facilities traverse National Forest System lands administered by more than one ranger district within the Coconino NF, the forest will coordinate with utility companies in the development of regular operating plans to document agreements and activities along these corridors for consistent and seamless decisions where appropriate, that can be integrated along whole linear rights-of-way or utility corridors.

Commenter: Heath, Sean

Comment:

Based on GIS files, the Strawberry Crater PWA extends into the power line rights-of-way (ROW) and Davey's PWA extends into the ROW and underneath existing power lines. As stated in the 2012 Final EA for Glen Canyon to Pinnacle Peak 345kV Transmission Lines Vegetation Management Project within the Coconino National Forest, the ROW for the double, adjacent lines is 300-feet plus an additional 60-feet beyond each ROW edge for hazard trees. The total width for vegetation management (including hazard trees) is 420-feet.[...] Alternative B Comments

Response:

The boundaries on the Strawberry Crater, Davey's, and Hackberry potential wilderness areas (PWAs) have been adjusted to ensure that they do not overlap the rights-of-way for these existing power lines. The boundary adjustments were very small and did not affect the evaluations of these PWAs. The Strawberry Crater PWA was reduced from 6,611 acres to 6,579 acres. The Davey's PWA was reduced from 1,779 acres to 1,739 acres. The Hackberry PWA was reduced from 26,044 acres to 25,836 acres.

Commenter: Heath, Sean

Comment:

Suggest the following language or something similar to address the issue of compatible uses within the t-line corridor and the type of acceptable plant communities: "Power lines and pipelines are located and co-located within existing energy corridors when compatible. Rights-of-way for all aboveground lines have low growing plant communities that do not interfere with overhead lines growing within the corridors." and/or "Low growing plant communities that do not interfere with overhead lines, should be maintained within power line corridors." P. 47, 79, 80, 2012 Draft Land and Resource Management Plan for the Prescott National Forest.

Response:

A guideline was added to the Special Uses section to address this comment. See FW-SpecUse-G-6.

Commenter: Heath, Sean

Comment:

Since the facilities identified above traverse National Forest System lands administered by more than one ranger district within the Coconino, Western requests that decisions related to our facilities be seamless from one ranger district to the next and that local solutions be integrated as a whole for linear rights-of-way or utility corridors that traverse more than one administrative jurisdiction.

Response:

A management approach has been added to the Special Uses section reminding forest managers that: Since some utility facilities traverse National Forest System lands administered by more than one ranger district within the Coconino NF, the forest will coordinate with utility companies in the development of regular operating plans to document agreements and activities along these corridors for consistent and seamless decisions where appropriate, that can be integrated along whole linear rights-of-way or utility corridors.

Commenter: Heath, Sean

Comment:

Where the power line crosses West Clear Creek, the Scenic Integrity Objective (SIO) is Very High. The boundary for the Very High designation is mapped underneath existing power lines. According to Agriculture Handbook Number 701, Landscape Aesthetics, a Very High designation means there should be "no degree of deviation from the landscape character". This designation may not be possible if power lines are within an individual's line of sight. Recommend that all Very High and High SIO designations lie outside the line of sight of power lines.

Response:

The Forest Plan has been adjusted in response to this comment. The SIO map in the Forest Plan has been corrected to indicate that the SIO for the utility corridor that crosses the West Clear Creek Wilderness has an SIO of "high." See map 13 in Appendix A of the Forest Plan. The map reflects that under Alternative B (modified) that larger transmission lines, such as the one crossing West Clear Creek are assigned an SIO of "high."

Commenter: Heath, Sean

Comment:

P. 240, Appendix B, Special Uses, 3rd bullet - There is discussion throughout the document about minimizing the abrupt edge along ROWs. Would this transition occur outside of the ROW? If so, is it the ROW holder's responsibility to create this transition, or does the forest envision a transition within the ROW? Is this where the extra 60 feet for hazard trees on either side of the ROW is incorporated (see 2012 Final EA for Glen Canyon to Pinnacle Peak 345kV Transmission Lines Vegetation Management Project within the Coconino National Forest)?

Response:

No change has been made in response to the comment regarding vegetation management outside of rights-of-way. As the comments suggest, vegetation management of this nature would require a decision based on site-specific information and would not necessarily be the responsibility of the holder of the right-of-way. The Forest Plan has been adjusted to address the comment regarding vegetation management within utility corridors. To provide more strategic and comprehensive coverage, one of the desired conditions in the Special Uses section was adjusted to acknowledge the legal mandates that apply to vegetation clearing for utility and energy transmission. See FW-SpecUse-DC-2.

Commenter: Hedwall, Shaula

Comment:

We also recommend removing the reference to mixed conifer in desired condition number 18.

Response:

The desired condition has been adjusted in response to the comment. The reference to mixed conifer types has been removed from the component. See FW-TerrERU-PP-DC-14.

Commenter: Hedwall, Shaula

Comment:

Desired condition number 15 is specific to the northern goshawk and describes forest conditions for post-fledgling areas (PFAs), foraging areas, and nest areas. How are northern goshawk foraging areas different from the general forest? How will the relatively denser canopies be measured in northern goshawk nest areas versus other areas? If PFAs are to contain 10 to 20 percent higher basal area in mid-aged to old tree groups, how will the PFA differ from the nest area?

Response:

The Forest Plan has been adjusted in response to this comment. The desired condition that describes the differences in the Ponderosa Pine ERU depending on the type habitat it provides for northern goshawk has been edited to better the forest conditions associated with post-fledgling family areas (PFAs), foraging areas, and nest areas. See FW-TerrERU-PP-DC-12.

Commenter: Hedwall, Shaula

Comment:

Under desired condition number 3, we recommend to focus the discussion on the PNVT, not specific wildlife home ranges, such as northern goshawk.

Response:

No change has been made in response to this comment. The reference to northern goshawk in this desired condition is only to indicate that fire is characteristic within and outside of the home range for northern goshawk. See FW-TerrERU-PP-DC-3.

Commenter: Hedwall, Shaula

Comment:

Ponderosa Pine Types Table 9 lists the "Desired Percent Composition" for ponderosa pine, but does not include any information as to where this information is derived. We recommend providing information on how these compositions of seral stages were determined.

Response:

The tables that list the "Desired Percent Composition" for various ERUs have been moved to Appendix F in the Forest Plan. Appendix F includes an introduction that provides a general description of how the seral stages included in the tables were determined. Additional information is available in the project record.

Commenter: Hedwall, Shaula

Comment:

As stated in the Draft LRMP, a standard is defined as a constraint upon project activity and design that is an absolute requirement to be met in design of projects and activities. Under the "Standards for All Vegetation Types," we recommend modifying the first standard as its current wording and prominence implies the USFS will be clear-cutting vegetation as a rule, rather than used as tool under particular circumstances. We recommend re-wording this standard to state "Uneven-aged management and free thinning will be used as cutting methods unless it is determined through site-specific analysis that clear-cutting is the optimum method for a particular area to make progress toward desired conditions. The maximum size opening that may be created using the clear-cut method shall not exceed 40 acres....."

Response:

This standard has been adjusted in response to your comment. The standard has been separated into two standards. One standard states that clearcutting shall only be used as a cutting method where it is determined through site-specific analysis to be the optimum method for a particular area to make progress toward desired conditions. The other standard clarifies that the maximum size opening that may be created in one harvest operation for the purpose of creating an even-aged stand shall not exceed 40 acres except when it is following a large-scale disturbance event such as a stand-replacing fire, wind storm, or insect or disease outbreak. See FW-TerrERU-All-S-3 and 4.

Commenter: Hedwall, Shaula

Comment:

Under "Management Approaches Grassland Types," we recommend adding FWS as a partner for coordinating on objectives for wildlife conservation, education, habitat restoration, and improvements; and recommend adding the black-footed ferret (*Mustela nigripes*) to the list of priority grassland species (management approach lists pronghorn and prairie dogs).

Response:

The management approach in the Grasslands section has been adjusted in response to this comment. It now states: Coordinate with Arizona Game and Fish Department and U.S. Fish and Wildlife Service on objectives for wildlife conservation, education, habitat restoration, and improvements, particularly regarding pronghorn, prairie dogs, and black-footed ferrets.

Commenter: Hedwall, Shaula

Comment:

Desired condition number 4 describes mesquite bosques as "open and park-like." Stromberg (1993) states most mesquite bosques are composed of high-densities of young or second growth multi-trunked trees. We recommend including Dr. Stromberg's work in developing desired conditions for mesquite bosque.

Response:

The desired condition that addresses mesquite bosque has been adjusted in response to this comment. Using Dr. Stromberg's information, the General Description and Background subsection in the Riparian Forest Types section has been modified. Rather than stating mesquite bosques should be open and park-like, mesquite bosques are described as having connected canopies with an open understory. A desired condition now recognizes that a variety of age classes should be present, including seedling, sapling, mature, and overmature trees. See FW-Rip-RipType-DC-6.

Commenter: Hedwall, Shaula

Comment:

Under the "Desired Conditions for Riparian Types", we recommend the following edits: * We suggest removing the last sentence of the first desired condition. This sentence does not add to the description of what is desired and gives a negative connotation to what is supposed to be a positive statement.

Response:

The Forest Plan has been adjusted in response to this comment. The sentence referencing impacts from livestock grazing has been removed. See FW-Rip-RipType-DC-1. Management of livestock grazing, and other authorized activities, are addressed in guidelines under Riparian Forest Types and Livestock Grazing. See FW-Rip-RipType-G-3 and FW-Graz-G- 1, 2, 4, 5, and 7.

Commenter: Hedwall, Shaula

Comment:

The description of Mixed Conifer with Aspen (page 59) states, "Historically, this PNVT had over 10 percent tree cover, with the exception of early, post-fire plant communities." Is the 10 percent a typographical error? This amount of tree cover seems very low for mixed conifer.

Response:

The Forest Plan has been adjusted in response to this comment. The sentence referring to the historic level of tree cover in the General Description and Background for the Mixed Conifer with Aspen ERU has been removed.

Commenter: Hedwall, Shaula

Comment:

We would like to suggest some changes to the monitoring question and possible methods and data sources for the Mexican spotted owl (*Strix occidentalis lucida*) (Question 12, Table 16). Currently, the question includes monitoring population trends for the owl and states that it will use the monitoring identified in the Recovery Plan for the Mexican Spotted Owl, First Revision (FWS 2012). We encourage efforts under this LRMP to focus more on habitat trends and issues as those are what can be measured based upon the desired conditions included in the plan. In addition, the occupancy monitoring design for population trends in the Recovery Plan looks at owl population trends range wide (over a very large geographic area). Information for the Coconino National Forest will be included in that effort, but this methodology would not be implemented separately for this forest. We recommend modifying the question to ask, "How have management activities influenced habitat quality and quantity for the Mexican spotted owl and do identified sites on the forest continue to be occupied through time?" If this suggestion does not fit your needs, we can meet with USFS staff to further discuss how we could improve upon the question asked and the possible means of answering it.

Response:

The Forest Plan has been adjusted in response to this comment. The monitoring question related to Mexican spotted owl has been expanded to ask additional questions related to the condition of Mexican spotted owl habitat. See Monitoring Question 20, a through e, in the Monitoring Plan in Chapter 5 of the Forest Plan. The monitoring questions identify the data sources that will be used to answer the questions. Project specific monitoring would be developed through individual projects.

Commenter: Hedwall, Shaula

Comment:

We recommend referring to the pronghorn by its standard name (which is pronghorn) rather than using "antelope." The Draft LRMP uses both terms, but we recommend using pronghorn.

Response:

The Forest Plan and the environmental impact statement have been adjusted in response to this comment. All references to "antelope" have been replaced with "pronghorn."

Commenter: Hedwall, Shaula

Comment:

Tables 10 and 11 list the "Desired Percent Composition" for mixed conifer with frequent fire and mixed conifer with aspen, but does not include any information as to where this information is derived. We recommend providing information as to how these compositions of seral stages were determined.

Response:

The tables that list the "Desired Percent Composition" for various ERUs have been moved to Appendix F in the Forest Plan. Appendix F includes an introduction that provides a general description of how the seral stages included in the tables were determined. Additional information is available in the project record.

Commenter: Hedwall, Shaula

Comment:

Table 12 lists the "Desired Percent Composition" for Spruce-Fir, but does not include any information as to where this information is derived. We recommend providing information as to how these compositions of seral stages were determined.

Response:

The tables that list the "Desired Percent Composition" for various ERUs have been moved to Appendix F in the Forest Plan. Appendix F includes an introduction that provides a general description of how the seral stages included in the tables were determined. Additional information is available in the project record.

Commenter: Hedwall, Shaula

Comment:

Based upon Table 12, the majority of spruce fire forest is in mature/old closed forest. We recommend providing more information in desired condition number 12 as to how northern goshawk nest areas could have 10 to 20 percent greater basal area and relatively denser areas than the majority of the closed spruce fir forest.

Response:

In some locations, post-fledgling areas (PFAs) in the Spruce-Fir Ecological Response Unit (ERU) may contain greater tree density than surrounding areas as is typical in some northern goshawk PFAs. In other areas, tree density may be the same as surrounding areas. Conditions in the Spruce-Fir ERU are intended to be a reflection of natural levels of disturbance and succession. The scale, location, and intensity of site specific disturbances would result in variability in tree density from which northern goshawks could select suitable nesting areas, around which PFAs could be established. See FW-TerrERU-SF-DC-1, 2, 8, and 10. Natural disturbances and processes are also promoted in wilderness. A large proportion of the Spruce-Fir ERU occurs in the Kachina Peaks Wilderness. See SA-Wild-DC-1, 3, and 4.

Commenter: Hedwall, Shaula

Comment:

We recommend including a desired condition specific to addressing the cultural importance of this area to tribes in our region. Currently, tribal considerations are lumped with recreational use and do not address the importance of this habitat type, or the mountain it occurs on, to tribal interests. We recommend coordinating with tribal representatives to develop a desired condition that reflects the cultural significance of the area.

Response:

The Forest Plan has information and plan direction that recognizes the cultural importance of the Alpine Tundra ERU. The General Description and Background for the Alpine Tundra section of the Forest Plan states that the Alpine Tundra ERU is probably the most significant cultural area on the Coconino NF for many tribes in the Southwest. The San Francisco Peaks Management Area, which includes all of the Alpine Tundra ERU on the Forest includes a desired condition that states the San Francisco Peaks provide a traditional cultural and religious setting for many American Indian tribes and are recognized as sacred to these tribes. See MA-Peaks-DC-1. The General Description and Background for the San Francisco Peaks Management Area recognizes that most of this management area is within the San Francisco Peaks Traditional Cultural Property.

Commenter: Hedwall, Shaula

Comment:

We appreciate the standard for Alpine Tundra provides for protections of the threatened San Francisco Peaks ragwort (*Packera franciscana*). However, it is unclear what is meant by "important habitat." The standard states, "activities...shall avoid important habitat for the San Francisco Peaks ragwort....." We recommend including more definition in this standard, to clarify to those implementing the LRMP what is meant by important habitat (i.e., is it designated critical habitat, occupied habitat, habitat with a high density of plants).

Response:

This standard has been adjusted in response to this comment. This component was moved to the Wilderness section and separated into a standard that addresses recreational activities in the alpine tundra ERU and another standard that addresses new route construction in San Francisco Peaks ragwort habitat. See SA-Wild-S-3 and 5. The second standard includes examples of things that could be considered important habitat, such as designated critical habitat, occupied habitat, and high density of plants. See SA-Wild-S-5.

Commenter: Hedwall, Shaula

Comment:

We appreciate the positive message stated in desired condition number 15; however, it is somewhat vague. Native pollinator success and survival is promoted by a diversity of vegetation types and a lack of non-native invasive plants, invertebrates, and other animals. We recommend enhancing this desired condition to meet your objective.

Response:

The Forest Plan has been adjusted in response to this comment. This topic is addressed the All Ecosystems section, which includes a desired condition for ecosystem conditions to promote endemic levels of pollinators. See FW-Eco-DC-4. Furthermore, a reference to the National Pollinator Best Management Practices has been added to the All Ecosystems section in Appendix D, Other Sources of Information. The Forest Plan does not identify particular pollinators of interest; they will be identified at the project level based on site-specific information.

Commenter: Hedwall, Shaula

Comment:

Invasive Species We recommend re-wording desired condition number two to read "Desirable nonnative subspecies, such as the Rocky Mountain Elk, where they exist, are not having negative impacts on native species." Although the elk that is currently present in northern Arizona is not the native subspecies, it is still the same species as the Rocky Mountain Elk.

Response:

The desired condition has been adjusted in response to these comments. Elk are no longer referenced as a desirable nonnative species and are no longer mentioned in the Invasive Species section. See FW-Invas-DC-1.

Commenter: Hedwall, Shaula

Comment:

We recommend removing "healthy" from the second desired condition. If the necessary soil, water, and vegetation attributes are functioning at or near potential, then they are likely "healthy."

Response:

The desired condition has been adjusted to address your comments. The word "healthy" is no longer being used as a description of condition. The reference to "historic levels" has also been removed. See FW-Rip-Spr-DC-1.

Commenter: Hedwall, Shaula

Comment:

We appreciate the use of the glossary in this document as there is a lot of terminology that can be used in many ways and this helps clarify for the reader how the USFS is using terms in the Draft LRMP. We recommend that in addition to the definitions, where possible, the USFS also include the citation or source of the definition.

Response:

Citations have been added to glossary definitions as appropriate.

Commenter: Hedwall, Shaula

Comment:

Since the Draft LRMP is very focused on fire-adapted ecosystems, we recommend "fire interval" and "fire rotation" be added to the glossary. These terms are often misunderstood and misused by the public and it would be helpful in describing how the desired fire regimes fit into the management approaches for the different fire-adapted ecosystems.

Response:

No change has been made to the Glossary in the revised Plan because neither of these terms is used in the revised Plan. These terms are used in the Final Environmental Impact Statement and have been added to the Glossary for that document.

Commenter: Hedwall, Shaula

Comment:

We recommend modifying the definition of "forage" used in the glossary. The definition refers to forage as "all browse and non-woody plants that are available to livestock or game animals for grazing or harvesting or feeding." We recommend changing "game animals" to "wildlife." There are many wildlife species that are not game animals that use forage.

Response:

The definition of the term "forage" in the Glossary for the Forest Plan has been adjusted to reflect that grazing animals can be domestic or wild.

Commenter: Hedwall, Shaula

Comment:

We recommend including more information in the definition of "free thinning" in order to better describe what is meant by this term. Helms (1998) defines free thinning as "a thinning that removes trees to control spacing and favor desired trees using a combination of criteria without regard for crown class." There seems to be confusion with many regarding term based upon our discussions with the public; therefore, we recommend including language such as the following: "Our understanding of free thinning is thinning to reduce canopy bulk density and increase canopy base height; essentially crown spacing becomes more important than tree vigor. Free thinning is often the best thinning method when the objective is to mitigate crown fire potential. Nonetheless, free thinning is not license to select trees however one likes; a specific thinning objective is required before properly implementing a free thinning."

Response:

The two objectives that mentioned "free thinning" have been edited to remove the term. See FW-TerrERU-MC-MCFF-O-1 and FW-TerrERU-PP-O-1. Because the term is no longer used in the revised Plan, it has not been added to the Glossary.

Commenter: Hedwall, Shaula

Comment:

All of the terms regarding northern goshawk habitat are referred to in the text of the Draft LRMP without the term "northern." In order for people to locate these terms, it would be beneficial to consistently refer to these terms in the text as "northern goshawk foraging areas," "northern goshawk nest areas," (emphasis added).

Response:

All references to "goshawk" in the revised Plan have been changed to "northern goshawk."

Commenter: Hedwall, Shaula

Comment:

Under the "Guidelines for Wildlife, Fish, and Plants," please include bald eagles in guideline number four. Both bald and golden eagles are protected under the Bald and Golden Eagle Protection Act and we think a reference to bald eagles (along with golden eagles) in this guideline would be appropriate.

Response:

The Forest Plan has been adjusted in response to this comment. Bald eagles have been added to the list of species identified in this component. To provide a more clear direction for listed species, bald eagles and golden eagles, part of this plan component has been converted into standard. See FW-WFP-S-2.

Commenter: Hedwall, Shaula

Comment:

We recommend re-wording guideline number 5 to simply state "Within existing water rights, excess water should be allowed to flow freely back into the existing channel, spring, and riparian habitat to maintain and improve water quality, water quantity, and timing of flows for aquatic species and associated habitat."

Response:

This guideline has been adjusted to incorporate your suggestion. See FW-Water-G-6.

Commenter: Hedwall, Shaula

Comment:

We recommend including information regarding Arizona Game and Fish Department's Statewide Wildlife Action Plan (specifically Tier 1a and 1b species) in the definition of "special status species."

Response:

The definition of "special status species" has not been adjusted as suggested. Adding all of the Tier 1a and 1b species from Arizona Game and Fish Department's Statewide Wildlife Action Plan to the definition would have caused the plan components that used the term "special status species" to have broader application than intended. After consideration of this comment, this term was removed from the Forest Plan. In its place, the components were edited to reference the species or group of species (threatened, endangered, sensitive, aquatic, etc.) on which the component was intended to apply. Tier 1a and 1b species were considered during the development and the refinement of the forest planning species list that is described in the FEIS.

Commenter: Hedwall, Shaula

Comment:

Chapter 2. Forestwide Management, Watersheds Under "Desired Conditions for Watersheds" the Draft LRMP states, "Watersheds provide habitat that supports adaptive animal and plant communities that reflect natural processes." In order to clarify this statement we recommend modifying the language to state "Watersheds provide habitat for animal and plant communities." The natural processes are covered in desired condition number 1.

Response:

As part of an effort to better integrate plan direction, this sentence was removed from the Watersheds desired conditions and direction associated with habitat was merged into one of the Wildlife, Fish, and Plants desired conditions. See FW-WFP-DC-1. Direction on the natural processes associated with watersheds is retained in FW-Water-DC-2.

Commenter: Hedwall, Shaula

Comment:

We noted as we read through the watershed section and following sections on water quality and water quantity, stream ecosystems, wetland/cienega and reservoirs/lakes, and springs there is not a single standard (constraint upon project activity and design) identified. We understand these resources are protected by many existing laws and policies, but there are other resources for which standards are identified for which the same is true. Since water is likely one of our most valuable resources in the Southwest and on the Coconino National Forest, we recommend the Final LRMP include some discussion as to why no standards are necessary for any of the watershed and water-based resources or further discuss why standards are not needed for water resources.

Response:

No standards have been added to the Forest Plan in response to this comment. In general, the Forest Plan does not repeat law, regulation and policy however applicable regulations. Direction on these other sources of information is listed in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan. There are guidelines in the sections on Watersheds and Water, Constructed Waters (which includes reservoirs), All Riparian, Stream Ecosystems, and Riparian Forest Types. As described under Plan Content in Chapter 1 of the Forest Plan, guidelines guide management activities and provide specifications that a project or activity would adopt unless there is a compelling or defensible reason to vary from the guideline. The intent of a guideline needs to be met although deviation from the explicit provisions of the guideline is permitted without a plan amendment. Deviation from the explicit provisions of a guideline, if it is meeting the intent of the guideline, must be documented in the project record. Projects that deviate from a guideline's intent must be accompanied by a plan amendment that would allow for the deviation.

Commenter: Hedwall, Shaula

Comment:

Under "Objectives for Watersheds" the objective stated calls for "five to seven priority 6th code watersheds to be trending toward Class 1 during the 10 years following plan approval." We recommend, here and throughout the document, each objective is reviewed to ensure it is specific, measurable, attainable/achievable, relevant, and timely.

Response:

The objectives associated with ecological resources have been reviewed and retained with some minor editorial adjustments. Objectives are not targets, but projections, and they may not be fully achieved based on a variety of factors. The objectives in the Forest Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives.

Commenter: Hedwall, Shaula

Comment:

It would be beneficial to provide those implementing the LRMP with information as to how the numbers of watersheds (or other resources) to be improved were chosen.

Response:

After reviewing the Watershed objective in response to your comment, this objective was removed from the Plan. The Watershed objective was not a unique objective to improve the condition of priority 6th code watersheds. Rather, the objective was relying upon activities that would be conducted to pursue other objectives. The intent of emphasizing priority 6th code watersheds is still carried forward in the Plan in FW-Water-G-2.

Commenter: Hedwall, Shaula

Comment:

We also recommend adding a sentence or two to the "General Description and Background for Watersheds" (or applicable resource area) or "Desired Conditions" to provide information as to why the objective(s) meet the above criteria.

Response:

As described in Concern/Response #42, this objective has been removed from the Plan.

Commenter: Hedwall, Shaula

Comment:

This section includes constructed waters, which is defined to include earthen stock tanks and artificial drinkers. However, we did not see any desired conditions, guidelines, or management approaches for these constructed waters. For many wildlife species (e.g., Chiricahua leopard frogs), these constructed waters have become essentially the only habitat available in many areas or important means of distributing wildlife across the forest. We recommend working with the FWS and the Arizona Game and Fish Department to develop some specific guidelines for constructed waters.

Response:

In response to your comment, reservoirs have been moved to a new section of the plan that provides guidance for Constructed Waters. See plan components in the FW-ConstWat section for direction on reservoirs and other constructed waters.

Commenter: Hedwall, Shaula

Comment:

In this section and throughout the Draft LRMP, there are statements referring to tribal use of plants. These statements are phrased, "Four percent of the plants known to be used by tribes that traditionally use the forest occur in water." We appreciate and support any opportunities the USFS takes in the LRMP to call out the importance of particular resources to tribes. However, we recommend adding information regarding how these tribes use these areas and how the management of these plants (or other resources throughout the plan) will be managed under the LRMP.

Response:

To centralize the information, now there are only two places in the forest plan that display the percentage of plants known to be used by tribes relative to the proportion of the riparian forest type or ERU on the forest. See General Description and Background sub-sections for Riparian Forest Types and Terrestrial ERUs. The Forest Plan does not describe how the plant collecting areas are used because that could vary by tribe; because this information may or may not be shared with the Forest Service; and because plant collection areas can shift in time and space depending on growing conditions. Plan components in the Tribal Relations and Uses and Forest Products section describe how the plants and plant collecting would be managed. For example, forest products for traditional and ceremonial tribal uses are available under conditions that minimize restrictions and are consistent with laws, regulations, and agreements with tribes; forest products should be authorized only when information is available to ensure the product will persist on the forest; and rare plant species should not be collected unless the forest has information that the species can withstand collection and will persist. See FW-FProd- DC-3, G-3, and 4. Forest projects and activities should be designed to promote the persistence of culturally important plants and tribal practitioners have access to areas to practice traditional activities, with reasonable limitations, consistent with public safety and multiple uses by other forest users. Forest products used by tribes are available for traditional practices and are sustained over time however this collection would not negatively affect the presence and distribution of those species on the forest. See FW-Trbl-DC-2, 3, G-2. A desired condition in the Pinyon Juniper section promotes robust crop of pinyon nuts, a culturally important resource, consistent with the capability of the site. See FW-TerrERU-PJ-DC-16. The Forest Plan assumes that properly functioning ecosystems would provide for the species composition needed for tribal plant collection thus the desired conditions for these plants are inherent within the desired conditions in the Riparian Areas and Terrestrial Ecological Response Units sections but each plant is not specifically called out. Site specific information for plant collection and tribal needs would arise out of conversations with the tribes and through tribal consultation. See FW-Trbl-DC-1.

Commenter: Hedwall, Shaula

Comment:

Under "Desired Conditions for Water Quality and Water Quantity," the first condition states, "Adequate quantity and timing of water flows are maintained to retain or enhance ecological functions, including aquatic species and riparian vegetation consistent with existing water rights and claims." We recommend removing the word "adequate" unless it is referencing a legal or specific definition. Otherwise, the desired condition should be "The quantity and timing of water flows...."

Response:

As suggested, the word "adequate" was removed from the first sentence in this desired condition. See FW-Water-DC-6 for revised version of this desired condition in the Water section.

Commenter: Hedwall, Shaula

Comment:

We recommend re-wording desired condition number 3 to state, "Water rights are sought and procured and existing instream water rights are maintained to ensure that enough water is guaranteed to provide for habitat and other forest needs, over the long term."

Response:

As recommended, this desired condition was adjusted. However, in its adjusted state, this plan component is more appropriate as a guideline and was changed to a guideline in the Water section. See FW-Water-G-3.

Commenter: Hedwall, Shaula

Comment:

The third guideline for springs states "Open vegetative conditions in the watersheds surrounding springs should be maintained to raise the water table." It is unclear what scale or vegetation type this is referring or what is meant by "open." In order to avoid issues in implementation, we recommend modifying this guideline to clarify when it is being followed and when it is appropriate to deviate from it.

Response:

The guideline has been adjusted to incorporate your suggestion. See FW-Rip-Spr-G-1.

Commenter: Hedwall, Shaula

Comment:

We recommend re-wording guideline number 4 to state, "Instream flow water rights for fish, other wildlife, and recreation beneficial uses should be procured for those streams without current water rights to ensure that the water remains on site and is not diverted for other consumptive uses."

Response:

The language relating to maintenance and procurement of instream water rights has been adjusted in the in the Water section in response to your suggestion. Maintenance of existing water rights is addressed in FW-Water-DC-6, which states: Water quality, water quantity and the timing of water flows support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities. Water quality, water quantity, and the timing of flows are sustained at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. Procurement of instream water rights is address in FW-Water-G-3, which states: Instream flow water rights should be procured for those streams without instream water rights to ensure that sufficient flow is provided for aquatic species, habitat, and recreation. In addition to FW-Water-G-3, there are multiple management approaches in the Water section which identify priorities and expectations for the Water program in the future. These management approaches remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest.

Commenter: Hedwall, Shaula

Comment:

We recommend modifying desired condition number 13 to state, "Endemic and rare plant communities are intact and functioning." Not all rare plants are endemics and not all endemics are rare, per se.

Response:

The reference to endemic rare plant communities has been adjusted in response to this comment. This component was merged with a similar desired condition in the Wildlife, Fish, and Plants section. That desired condition does not use the term "endemic rare plant communities." See FW-WFP-DC-5.

Commenter: Hedwall, Shaula

Comment:

Under the "General Description and Background" section, rather than calling riparian areas "healthy," we recommend using a more descriptive term such as "functioning."

Response:

The General Description and Background section for the Streams subsection has been edited and "healthy" has been removed as a description in response to your comment. See General Description and Background for Stream Ecosystems in the Riparian Areas section.

Commenter: Hedwall, Shaula

Comment:

Under "Desired Conditions for Stream Ecosystems" we recommend two modifications. In desired condition number 5, we recommend modifying sentence three to state "Flooding creates a mix of stream substrates for fish habitat, and sites for germination and establishment of riparian vegetation."

Response:

The desired condition has been adjusted to incorporate your suggestion. See FW-Rip-Strm-DC-2.

Commenter: Hedwall, Shaula

Comment:

In desired condition number 7, we recommend modifying the second sentence to read, "Native fish and other aquatic organisms have unobstructed passage upstream and downstream at all bridges, culverts, and diversion structures, unless there is a specific need to provide a passage barrier such as to physically separate native and nonnative aquatic species." The sentence currently only refers to nonnative fish, but there are barriers that prevent movement of species other than fish that may be desirable in the future.

Response:

In response to your comment, this desired condition was separated into two desired conditions. One of the desired conditions addresses the general desire for connectivity along streams. See FW-Water DC-4. The other desired condition more directly addresses your comment regarding the situational desirability of barriers in streams to restrict passage of aquatic species, not just nonnative fish. See FW-WFP-DC-9.

Commenter: Hedwall, Shaula

Comment:

Wetland/Cienega and Reservoirs/Lakes This section equates wetlands and reservoirs as the same and the desired conditions, objectives, and guidelines for wetlands and reservoirs are lumped together (desired condition three states "all wetlands except reservoirs are maintaining or trending toward proper functioning condition). We respectfully disagree that wetlands are the same as reservoirs and lakes and highly recommend desired conditions, objectives, and guidelines are developed for each separately. The reservoirs and lakes on the Coconino National Forest typically have municipal or other Federal partners involved in their management (Bureau of Reclamation and Salt River Project for C.C. Cragin or the City of Flagstaff for Lake Mary) and these areas are likely to be managed much differently than a wetland on Anderson Mesa.

Response:

In response to your comment, reservoirs have been moved to a new section of the plan that provides guidance for Constructed Waters. See plan components in the FW-ConstWat section for direction on reservoirs and other constructed waters.

Commenter: Hedwall, Shaula

Comment:

We recommend modifying the first desired condition to state, "Springs provide sufficient water to maintain functioning habitats for native and...." Please also define what desirable nonnative species would occur at springs. We understand in wetlands, reservoirs/lakes, or streams there may be desirable nonnative fishes, but we are interested in understanding what desirable nonnatives might be managed for at springs.

Response:

The section on springs has been modified to incorporate this concept. The plan component has been clarified to indication that functional soil, water, and vegetative resources are the desire. See FW-Rip-Spr-DC-1. Furthermore, FW-Rip-Spr-DC-2 references native aquatic and riparian species. A guideline would prevent the introduction or spread of disease, invasive, or undesirable species. See FW-Rip-Spr-G-3. A definition for desirable non-native species has been added to the Glossary, but the term is no longer used in the Springs section.

Commenter: Hedwall, Shaula

Comment:

We recommend re-wording desired condition six to state, "Plant cover protects the banks, edges, and shorelines of springs. Plant distribution and occurrence is resilient to natural disturbances."

Response:

The desired condition has been adjusted to address your suggestion. See FW-Rip-All-DC-5.

Commenter: Hedwall, Shaula

Comment:

One of the identified management approaches for springs is "work with partners and stakeholders to develop strategies for restoration of upland watersheds to improve spring flows." Restoration, even as defined in the Draft LRMP, is a difficult goal and what is considered restoration in many vegetative communities is still not well-understood. It is also possible that restoration objectives in upland areas may not improve spring flows (e.g., spring flow may be impacted by groundwater pumping in the area). We recommend this management approach be modified to reflect the complexity of the issue surrounding upland restoration and potential modification of spring flows.

Response:

The management approach has been adjusted to address your comment. The adjusted management approach can be found in the FW-Rip-Spr section and states the following: Continue working with partners and stakeholders, including tribes, to inventory, classify, assess, and prioritize springs and recharge areas for restoration, and to implement restoration activities. Include consideration of rare and endemic species when evaluating springs for restoration.

Commenter: Hedwall, Shaula

Comment:

Biophysical Features - Caves, Cliffs, and Talus Slopes Under the General Description and Background section, we recommend underlining "significant cave" to match the glossary (only "significant" is underlined).

Response:

The General Description and Background for the Geological Features section has been edited to respond to this comment. The term "significant cave" is now hyperlinked to the definition in the Glossary.

Commenter: Hedwall, Shaula

Comment:

Under the "Desired Conditions for All Vegetation Types," we recommend the following modifications: * We recommend re-wording desired condition number 7 to state, "Vegetation provides sustainable amounts of products such as wood fiber or forage. Livestock grazing and wood fiber harvest activities contribute to aspects of the social, economic, and cultural structure and stability of rural communities."

Response:

The Forest Plan has been adjusted in response to this comment. The suggestion related to livestock grazing has been incorporated in FW-Graz-DC-1. The suggestion related to wood fiber harvest has been incorporated into the Forest Products section. See FW-Fprod-DC-1.

Commenter: Hedwall, Shaula

Comment:

We recommend re-wording desired condition number 9 (and all other desired conditions throughout the plan that are similar to this) to state, "Plants used by local tribes and those that traditionally use the forest, are thriving."

Response:

Several changes have been made to the Forest Plan in response to this comment. This direction has been moved from the All Vegetation section to two other sections that are more aligned with the topic. A desired condition in the Tribal Relations and Uses section addresses this topic. It seeks to ensure that forest products used by tribal members, organizations, and communities with ancestral or historic ties to the Coconino NF are available for traditional practices and are sustained over time. See FW-Trbl-DC-3. A desired condition in the Forest Products section also addresses this topic. It seeks to ensure that forest products are available for traditional and ceremonial tribal uses. See FW-FProd-DC-3.

Commenter: Hedwall, Shaula

Comment:

We recommend re-wording desired condition number 10 to state, "Rare and culturally important plant species and their habitats are protected and enhanced."

Response:

The Forest Plan has been adjusted in response to this comment. This desired condition has been removed from the Forest Plan because enhancement and protection of rare and culturally important plant habitat is addressed in other sections of the Forest Plan. Desired conditions for rare plants are included in the Wildlife, Fish, and Plants section. See FW-WFP-DC-1 and 2. Plan components for culturally important plants are included in the Tribal Relations and Uses section. See FW-Trbl-DC-2 and 3, FW-Trbl-G-1, and a Tribal Relations and Uses management approach, which states: The Coconino NF and area tribes have a mutual interest in maintaining healthy, sustainable populations of plants and other resources important for traditional and cultural purposes. Work with area tribes to identify, collaboratively manage, and monitor these resources, as well as build and maintain more detailed information about culturally important plants. Continue to manage the land in a spirit of shared stewardship with the tribes.

Commenter: Hedwall, Shaula

Comment:

Under the "Guidelines for Water Quality and Water Quantity," guideline number two states at least 80 percent of total streambank linear distance should be maintained.... Please cite the source or note why 80 percent was chosen.

Response:

After reviewing this guideline in response to your comment, the guideline was edited and the reference to 80 percent of total streambank linear distance was removed. Furthermore, because this guideline applies to streamcourses, it was moved to the Streams subsection in the Riparian section of the plan. See FW Rip-Strm-G-1.

Commenter: Hedwall, Shaula

Comment:

The direction for Great Basin Grassland, Pinyon-Juniper with Grass, and Montane Grassland potential natural vegetation types in and surrounding Wupatki National Monument and Sunset Crater Volcano National Monument are important for landscape level conservation of associated species such as pronghorn. Sunset Crater Volcano National Monument is largely isolated to the south by built-out neighborhoods in the Doney Park-Timberline area; east by U.S. Highway 89; and southeast by intensive motorized recreation on the Cinder Hills Off-Highway Vehicle (OHV) Area. The proposed expansion of the Strawberry Crater Wilderness under Alternatives B and C could provide a greater degree of ecological integrity and landscape connectivity between the two monuments, in particular for pronghorn which have an expansive range within the region. The Draft LRMP direction for this area is also crucial for maintaining the desired scenic experience along Forest Road 545. Visitor use statistics for Sunset Crater Volcano National Monument show approximately 180,000 park visitors have used this road since 2010 (annually).

Response:

The Forest Plan contains plan components that ensure the areas adjacent to Wupatki National Monument and Sunset Crater Volcano National Monument are managed in a manner that may be beneficial to these national monuments. Desired conditions for seek to have vegetation on the Forest functioning properly within its type and capability. See FW-TerrERU-All-DC-2. The Forest Plan also provides specific desired conditions for the Great Basin Grassland, Montane/Subalpine Grassland, and Pinyon-Juniper with Grass Ecological Response Units. See FW-TerrERU-Grass-DC-1 through 9, and FW-TerrERU-PJ-DC-1 through 5. Plan components in the Painted Desert and Volcanic Woodlands Management Area also promote management that would be beneficial to and compatible with Sunset Crater Volcano and Walnut Canyon National Monuments including preservation of cultural sites and archaeological sites, unroaded landscapes, and clearly delineated boundaries. See MA-PntdDsrt-DC-1 and 2, and MA-VolcanWd-DC-3, 4, and G-1. The Forest Plan includes the Strawberry Crater Recommended Wilderness Area, which could have some of the favorable results suggested in the comment. The Forest Plan does not provide management direction specific to Forest Road 545. Those types of decisions are made at the project-level based on site specific information. However, the Forest Plan does provide a framework that ensures the concerns regarding management of this road are considered. The Roads and Facilities section includes a desired conditions for roads and road corridors to be managed with scenery in mind. See RdsFac-DC-1 and 2. Furthermore, management approaches in the Painted Desert and Volcanic Woodlands management areas remind forest managers to coordinate with the National Park Service to develop and ensure compatible management of overlapping resources in these management areas.

Commenter: Hedwall, Shaula

Comment:

The definition of "livestock utilization" seems incomplete based upon definitions used in USFS Environmental Assessments and other documents. We recommend modifying this definition to match what has been used in other documents.

Response:

The term "livestock utilization" is no longer used in the Forest Plan and has been removed from the Glossary. The plan direction related to permitted livestock that have access to riparian areas has been moved from the Riparian section to the Livestock Grazing section because the plan component only applies to management of livestock grazing. See FW-Graz-G-7.

Commenter: Hedwall, Shaula

Comment:

When referring to Sunset Crater as a NPS monument, the proper name is Sunset Crater Volcano National Monument. This needs to be corrected throughout the document.

Response:

The Forest Plan has been adjusted in response to this comment. All references to the Sunset Crater Volcano National Monument have been checked to ensure the proper name is being used.

Commenter: Hedwall, Shaula

Comment:

NPS would support the language in Alternatives A or C in regards to snowmobile use being restricted from recommended wilderness areas, primitive and semi-primitive non-motorized areas, and the Walnut Canyon Management Area. This is described in Volume 2, page 593 under Recreation Suitability.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Comment:

A primary and continuing concern from the Flagstaff-Lake Mary Ecosystem Plan Amendment is that the Draft LRMP and analysis does not strongly recognize the ecologically unique and fragile nature of recent volcanic cinder soils from the Sunset Crater Volcano eruption. As much as 600 square miles around Sunset Crater Volcano, including the Cinder Hills, Strawberry Crater, Deadman Mesa, Red House Basin, and Kana-a Lava Flow areas within the Coconino National Forest are inundated by deposits of unconsolidated volcanic cinders up to 1000 feet deep or even deeper (Hooten and Ort 2007). Within the young volcanic deposits, soils have barely begun to form, and are likely as unproductive as the other unproductive soil types described in the Soil Condition and Productivity section on pages 97 - 100 of Volume 1 in the Draft EIS. Comparisons of soil function and nutrient cycling across a chronological series of cinder cones of different ages in the San Francisco Volcanic Field (Selmants 2007; Selmants and Hart 2008) suggest these soils take thousands of years to mature into typical soils that are productive and capable of supporting typical ponderosa pine forest and understory vegetation. The Natural Resources Conservation Service is currently nominating entirely new soil series based on recent soils inventories at Sunset Crater Volcano and Wupatki (Natural Resource Conservation Service, in prep.), new ecosite descriptions are likely to result. Although research is needed, field observations indicate at depths of somewhere between 3 and 6 feet, the loose unconsolidated volcanic scoria, cinder, and ash deposits are a unique medium where plant establishment and survival is tenuous.

Response:

The Forest Plan does not specifically say that recent cinder soils are ecologically unique and fragile but it does address cinder soils in two main areas of the plan - Soil and the Geological Feature subsection of Biophysical Features. Desired conditions in the Soil section promote properly functioning soils and soil productivity within the capability of the site. See FW-Soil-DC-1,2. There is also a guideline that would apply to cinder soils in some circumstances. This guideline requires project-specific design features when projects have a moderate or severe erosion hazard, on steep slopes, and on soils sensitive to degradation when disturbed. See FW-Soil-G-3. Two management approaches remind managers to use published terrestrial ecosystem survey information and to conduct onsite soil investigations as a basis for evaluation of a project and predicting impacts and suitability for different terrestrial ecosystems. They read: Use published terrestrial ecosystem survey information: (1) for broad resource and forestwide assessments and land management and project planning at regional, forest, and district levels; (2) as the basis for determining project goals and objectives, desired ecological conditions, and for predicting effects and impacts of the different management prescriptions and activities upon each terrestrial ecosystem; and (3) for the initial selection of areas for proposed projects. Conduct onsite soil investigations and refine mapping for soil disturbing projects that require site-specific, precise, highly detailed soil information, which is beyond the scale of the terrestrial ecosystem survey. Analyze or collect site-specific terrestrial ecosystem survey information as needed to accurately determine limitations, suitability, and productivity potentials of the different terrestrial ecosystems that occur. The Geological Features subsection includes the slopes of cinder cones as talus slopes for which there is specific plan direction. Desired conditions would keep these slopes generally undisturbed so the geological, hydrological, biological and other resource values can be maintained. See FW-BioPhys-Geo-DC-1. A guideline would require that the integrity and function of talus slopes be maintained. See FW-BioPhys-Geo-G-1. A management approach in this same subsection reminds managers to educate the public about the unique ecological and aesthetic value of biophysical features including resource protection.

Commenter: Hedwall, Shaula

Comment:

The proposed Anderson Mesa Wildlife Habitat Management Area under Alternative C could enhance and provide for longer term functional habitat linkage, and contribute to the conservation of these and other wildlife species within the monument. The maintenance of wildlife habitat connectivity and dispersal corridors southward across Anderson Mesa is crucial to conserving species within the canyon that have large ranges. These species are mountain lion, black bear, peregrine falcon, bald eagle, golden eagle, Mexican spotted owl, and a variety of migratory and nesting songbirds.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Hedwall, Shaula

Comment:

Fire management direction within the Walnut Creek watershed is particularly important with regard to preventing massive sediment releases into the Walnut Creek riparian corridor following stand-replacing wildland fires.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Hedwall, Shaula

Comment:

It is unclear in the Draft LRMP and in the DEIS if fire suppression and use of lightning-ignited fire are going to be "decisions" in the LRMP and thus consulted on under Section 7, or if the USFS will continue to treat these actions as emergency actions under the Endangered Species Act. We recommend clarifying this throughout the documents. It would seem that the specific objectives in the Draft LRMP and DEIS to treat a specific number of acres with naturally ignited fire (page 34, 51 in Draft LRMP) would allow us to determine how this will be addressed in our section 7 consultation on the LRMP.

Response:

Plan language has not been changed in response to this comment, however the Final Environmental Impact Statement will clarify this issue. Acres of naturally ignited fire are included in the objectives for some ecological restoration units. The acres of naturally ignited fires represent an estimate of acres in specific ERUs that could be burned based on historical use of naturally ignited fires. These acres were used in vegetation modelling. Although objectives are plan decisions, consultation on naturally ignited wildfires will occur separately from consultation with U.S. Fish and Wildlife Service on the Forest Plan. Naturally ignited wildfires are considered an emergency action that requires expedited consultation and consultation occurs on a fire-specific basis. This is guided by 50 CFR 402.05 and direction in Forest Service Manual 2671.45f. The approach of the Forest Plan is to not repeat law, regulation, and policy.

Commenter: Hedwall, Shaula

Comment:

Alternative C has many components tied to wildlife concerns and makes recommendations for management in the East Clear Creek Watershed that it implies are not currently addressed in the existing LRMP or in the proposed revised LRMP (Alternative B). The proposal in Alternative C to designate 5 Wildlife Habitat Management Areas (WHMAs) within the East Clear Creek Watershed does not account for the ongoing management and efforts that the USFS, FWS, Arizona Game and Fish Department, Arizona Elk Society, livestock permittees, and others have made to manage this area specifically for wildlife since 1998 when we collectively developed the East Clear Creek Watershed Recovery Strategy for the Little Colorado Spinedace and Other Riparian Species (USFS 1999), significantly modified the Buck Springs Allotment, and purchased the Dane Springs inholding and grazing permit throughout the area in order to improve wildlife habitat throughout this area. We recommend the Final EIS provide information regarding these efforts along with the work that has occurred be included in the discussion regarding Alternative C.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Hedwall, Shaula

Comment:

We recommend enhancing the current definition of "wildlife corridors" to include the following information: A wildlife corridor is a link of wildlife habitat, generally native vegetation, which joins two or more larger areas of similar wildlife habitat. Corridors are critical for the maintenance of ecological processes including allowing for the movement of animals and the continuation of viable populations. By providing landscape connections between larger areas of habitat, corridors enable migration, colonization, and interbreeding of plants and animals. Corridors can consist of a sequence of stepping stones across the landscape (discontinuous areas of habitat such as wetlands and roadside vegetation), continuous linear strips of vegetation and habitat (such as riparian strips, ridge lines etc.), or they may be parts of a larger habitat area selected for its known or likely importance to local fauna. Wildlife corridors may also connect wildlife populations separated by human activities or structures (such as roads, or development).

Response:

In response to this comment, the definition in the Glossary for wildlife corridors has been modified as follows: Wildlife corridors A wildlife corridor is a link of wildlife habitat, generally native vegetation, which joins two or more larger areas of similar wildlife habitat or habitat needed seasonally (such as summer and winter range). Corridors are critical for the maintenance of ecological processes including allowing for the movement of animals and the continuation of viable populations. By providing landscape connections between larger areas of habitat, corridors enable migration, colonization, and interbreeding of plants and animals. Corridors can consist of a sequence of stepping stones across the landscape (discontinuous areas of habitat such as wetlands and roadside vegetation), continuous linear strips of vegetation and habitat (such as riparian strips, drainages, ridge lines etc.), or they may be parts of a larger habitat area selected for its known or likely importance to local fauna. Wildlife corridors may also connect wildlife populations separated by human activities or structures (such as roads, or development).

Commenter: Hedwall, Shaula

Comment:

The definition of "viability" used in the glossary seems problematic. The definition currently defines viability as the "capacity of living, or being distributed over wide geographical limits." Species can be viable and be very narrowly distributed. We suggest using the definition from the USFS 1982 Planning Rule to be consistent with the planning regulations.

Response:

The term "viability" no longer occurs in the main chapters of the revised Plan. The definition has been removed from the Glossary.

Commenter: Hedwall, Shaula

Comment:

Pilot studies (Swan, 2002; Kennedy, 2005; NPS data and files, 2007-2008; NPS files 2013) of intensively disturbed sites within the Cinder Hills OHV Area have indicated the following: pulverized and compacted cinders; decreased water infiltration; increased tree root exposure; lowered ponderosa pine recruitment; extensively altered microtopography; and trends towards increased barren areas. Within Sunset Crater Volcano, heavy non-motorized recreation has impacted fragile volcanic spatter formations. In some areas, segments of abandoned trails and closed social trails remain evident 40 years later. Tracking and trampling in particular appears to have long-term impacts and detracts from scenic quality on slopes greater than 15 degrees. Soil function and vegetation within this cinder terrain, likely require a much longer time to recover from various disturbances, both natural and human caused. For these reasons it is extremely important to the NPS that commitments to deter OHV use from occurring on surrounding volcanic cinder terrain be fulfilled. The NPS strongly concurs with the Draft EIS statement that a management plan for the Cinder Hills OHV Area is needed.

Response:

Desired conditions in the Forest Plan would clearly delineate the boundary between The Cinder Hills Off-Highway Vehicle Area and Sunset Crater Volcano National Monument and information would be provided to drivers to distinguish between the rules governing the Monument and rules governing the OHV area. See MA-VolcanWd-DC-3. Implementation of desired conditions in the section on Interpretation and Education would result in visitors having clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. Management approaches in the Volcanic Woodlands Management Area remind managers to coordinate with the National Park Service on overlapping resources and managing motorized recreation to prevent intrusion into Sunset Crater Volcano National Monument and Strawberry Crater Wilderness Area. They are: Coordinate with the National Park Service to develop and ensure compatible management of overlapping resources in this management area. Manage motorized recreation in and around the Cinder Hills Off-Highway Vehicle (OHV) Area to prevent intrusion on Sunset Crater Volcano National Monument and Strawberry Crater Wilderness Area.

Commenter: Henning, Blake

Comment:

We are also troubled by FW-Invas-dc-11. The elk present on the CNF today are believed to be a different subspecies from what occurred on the CNF in the pre-settlement era. There is a growing body of genetic research that suggests that currently recognized subspecies may not be subspecies at all, but rather achieved only unique population status. As such we do not believe elk should be named in this statement.

Response:

The desired condition has been adjusted in response to these comments. Elk are no longer referenced as a desirable nonnative species and are no longer mentioned in the Invasive Species section. See FW-Invas-DC-1.

Commenter: Henning, Blake

Comment:

Based on both documents, it is apparent the CNF plans to close an additional 200-plus miles of roads under the auspices of the selected alternative. We strongly advocate this road closure process be incorporated in the TMR/TMP process. We believe the public should have input in the closing of specific roads and an opportunity to comment on proposed closures.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: Henning, Blake

Comment:

In FW-Rec-Disp-DC Camping 13 a constraint of "overcrowding" is placed on dispersed camping areas as a trigger to regulate use. Overcrowding is not defined and is probably best defined by the occupants. We suggest the term overcrowding be deleted to prevent it from becoming an undefined metric. The desired condition of soil and vegetation may better define overcrowding when coupled with recognition of length of time of occupancy.

Response:

The sentence referencing over-crowding has been deleted as suggested for several reasons. The direction now recognizes a range of dispersed camping opportunities that is not constrained by an undefined lower density of users. See FW-Rec-Disp-DC-4. Furthermore, the desire for natural character as part of dispersed recreation is already addressed in another desired condition. See FW-Rec-Disp-DC-3.

Commenter: Henning, Blake

Comment:

In FN-Wfp-Dc1 (pp 72-73) the last sentence seems to indicate that all human made habitat alterations may be removed from the CNF in time. We hope this is in reference to non-permanent structures. We request this be re-written so as to define what is to be removed.

Response:

This desired condition has been adjusted in response to the comments. One of the purposes of the component is to recognize that human-made or altered habitats may be needed to support species populations or meet long term population goals. The desired condition has been adjusted to clarify this purpose. See FW-WFP-DC-8.

Commenter: Henning, Blake

Comment:

We can support the Desired Conditions noted in Alternative B. but feel the process to reach them may result in the CNF moving away from multiple use to single use management (restoration). We feel the Desired Condition Goals should be re-examined. We fear the goals may become barriers to wildlife habitat enhancement projects, especially in small scale areas. For example, the operation and maintenance of wildlife water may become a conflict to restoration of vegetation on a site such as a small stand of low elevation aspen.

Response:

Project-specific analyses are conducted for all projects planned on the Forest. Balancing management concerns for aspen (see FW-TerrERU-AspMpl-DC-1, 2, and 3), wildlife habitat (FW-WFP-DC-1, 2, and 3), and wildlife waters (FW-ConstWat-DC-1) occur at the project-level using site specific information.

Commenter: Henning, Blake

Comment:

The CNF currently has 10 designated Wilderness Areas (WA). We do not support the addition of any new WAs as proposed in Alternatives B and C. WA designation impedes forest management and wildlife management. All of the proposed areas can be managed under existing prescriptions to achieve the wilderness values without WA designation. If these areas require an additional layer of management regulations, we suggest using the "quiet areas" status referred to in the documents. Any restriction of access makes achievement of big game harvest goals difficult, as well as denying many recreation users the opportunity to access the area.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for

determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Henning, Blake

Comment:

We strongly support keeping the CNF open to recreational shooting (we do not support implementation of Alternative (alt.) C). We recognize as more of the urban-wild land interface becomes residential, adjustments will be required. We hope these adjustments will not be driven by a few who feel recreational shooting should be banned from the CNF. We also urge that existing suitable sites such as material pits remain open as to provide safe venues for such activities.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Comment:

RMEF has always supported multiple uses of our public lands, and is very much concerned that less management is taking place and wildlife habitat management is focused on the needs of a few sensitive species to the detriment of wildlife species that are currently common. We believe that healthy habitat for all wildlife should drive management goals. The RMEF supports actively managed landscapes to enhance elk forage based on the best available science. Recent studies have shown the importance of nutritional quality of forage areas. Management to sustain large areas of elk habitat as forage areas, and to enhance the nutritional quality of these forage areas, are key aspects of elk habitat management that need explicit consideration in the forest plan. Based on a variety of studies conducted, limits on the nutritional resources available to elk in turn limit animal performance, and by extension, limit the productivity of herds (The Starkey Project 102-112, 2005). In a given watershed or other large landscape, striving to maintain at least half the area defined as elk forage areas (per definition provided by elk habitat effectiveness models) is likely to be optimal, but nutritional enhancements in existing forage areas is equally important. We are concerned with the amount of early seral (young forest) that you have planned for Piñon-Juniper with Grass (5%), Piñon-Juniper Evergreen Shrub (5%), Ponderosa Pine (4.2%) and Mixed Conifer with Frequent Fire (9%) in your desired proportion of seral stages tables.

Response:

The seral stages listed in the tables that were included in the desired conditions for the Pinyon Juniper with Grass, Pinyon Juniper Evergreen Shrub, Ponderosa Pine, and Mixed Conifer with Frequent Fire ERUs are intended to represent the desired proportion of seral stages of these ERUs at the forest scale. The proportions were not adjusted in response to these comments. This table (along with similar tables included in the plan direction for other Ecological Response Units) has been moved to Appendix F of the Plan and is now identified as tables 16, 17, 18, and 19. The Introduction for Appendix F explains that seral stage proportions for modeled states should be assessed at the scale of the entire Ecological Response Unit within a Forest boundary or greater. Collectively, the table plus the more detailed text in the plan comprise the desired conditions. Seral stage proportions are rarely, if ever, applied at the project level. Because these seral stages only apply at these very broad scales, they should not conflict with variations in seral stages that are associated with natural disturbance regimes observed at the project level. The desired condition is to have characteristic fire sustain predominantly open pinyon juniper, ponderosa pine, and mixed conifer frequent fire ERUs. Predominantly open conditions would support herbaceous plants, properly functioning soil, natural disturbance regimes, and all-aged vegetation structure. See FW-TerrERU-PP-DC-2, 3, 4, 8, 10, and 13.

Commenter: Henning, Blake

Comment:

The RMEF recognizes that the Forest Plan Revision Process under the 2012 Planning Rule is designed to: o Emphasize restoration of natural resources to make our National Forest Service (NFS) lands more resilient to climate change, protect water resources, and improve forest health o Contribute to ecological, social, and economic sustainability by ensuring that all plans will be responsive and can adapt to issues such as the challenges of climate change, the need for forest restoration and conservation, watershed protection, species conservation, and the sustainable use of public lands to support vibrant communities o Be consistent with Federal policy on the use of scientific information and the Agency's expertise and experience gained in over thirty years of land management planning We also realize that there is an opportunity to consider focal species, and respectfully request that elk be considered in that regard in all planning efforts. While elk are not classified as a sensitive or endangered species, they are an excellent surrogate for early seral (young forest) dependent birds and mammals. We strongly believe that early seral habitat is underrepresented in most habitat types on the national forests. Elk are highly sought after charismatic mega fauna that appeal to young and old alike, and are a very important species for the local economies of elk country through hunting and wildlife watching.

Response:

The Coconino Forest Plan is under the 1982 Rule provision which does not reference focal species. Focal species are an aspect of the 2012 Planning Rule. See 36 CFR Part 219.12 (a) (5) (iii).

Commenter: Henning, Blake

Comment:

We do not support Alternative C. It is in fact not a wildlife habitat alternative, but merely an alternative to restrict use of the area by forest visitors. Had such restrictions imposed by Alternative C. been effective, the Wildlife Refuge System developed by the Arizona Game and Fish Department in cooperation with the USFS in the 1930s-40s would have proven it a valuable technique.

Response:

No change has been made in the Forest Plan in response to comment. The management areas in Alternative C that were designed to managed to have more primitive and natural settings with reduced human-related disturbance have not been included in the Forest Plan. These management areas have been retained in Alternative C. They have been included in that alternative to respond to concerns that the forest plan revision effort needed to consider management options that would reduce impacts associated with motor vehicles and provide more primitive and natural settings with reduced human-related disturbance . Including these management areas in Alternative C provided the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives.

Commenter: Heyer, Gail

Comment:

Those jeep tours who work hard to maintain the trails that they are authorized to use should be entitled to continue to do so.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not decide whether existing jeep tours should continue. That decision is made when it is time to consider whether to renew the special use authorization.

Commenter: Jagels, Ryan

Comment:

GIS data & LRMP 3 168 Environmental Study Areas Overhead distribution power lines occur within the Elden ESA and Old Caves ESA. It is important that Guidelines 1 and 2 do not limit the ability for APS to extend/expand these utility lines if local energy needs increase.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan includes several guidelines that could restrict expansion or extension of utility lines with Environmental Study Areas. See MA-MtElden-G-5 and 6 and MA-FlagN-G-1 and 2. The actual determination would be made at the project level based on site specific information.

Commenter: Jagels, Ryan

Comment:

Alt. B - Increasing the total acres for nonmotorized recreation to 387,145 may decommission existing power line maintenance roads that need to be utilized for the long term operation of the power lines.

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Jagels, Ryan

Comment:

DEIS 2 29 Motor Vehicle Noise Topic #9 Alt. A - Preferred alternative

Response:

Alternative A is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Draft

Commenter: Jagels, Ryan

Comment:

Alt. D - Preferred alternative

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such

resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Jagels, Ryan

Comment:

Alt. C - Increasing the total acres for nonmotorized recreation to 515,433 will likely decommission existing power line maintenance roads that need to be utilized for the long term operation of the power lines.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Jagels, Ryan

Comment:

LRMP Appendix B 240 Special uses The third bullet point requires supervising vegetation management to lessen abrupt vegetation transition in powerline rights-of-way. In most cases the NEPA has not been conducted outside the right-of-way to allow for feathering or other techniques outside the ROW to accomplish this management practice. While the utility industry understands this management practice, it must remain optional and the FS be responsible for the NEPA required to conduct outside of ROW clearing to minimize visual impact.

Response:

No change has been made in response to the comment regarding vegetation management outside of rights-of-way. As the comments suggest, vegetation management of this nature would require a decision based on site-specific information and would not necessarily be the responsibility of the holder of the right-of-way. The Forest Plan has been adjusted to address the comment regarding vegetation management within utility corridors. To provide more strategic and comprehensive coverage, one of the desired conditions in the Special Uses section was adjusted to acknowledge the legal mandates that apply to vegetation clearing for utility and energy transmission. See FW-SpecUse-DC-2.

Commenter: Jagels, Ryan

Comment:

Alt. C - Removing 847 miles of roads will likely inhibit access for long term maintenance of existing power lines.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Jagels, Ryan

Comment:

GIS data & LRMP 3 156 - 157 Recommended Wilderness The Davey's PWA from Alternative B intersects with an APS power line in a couple locations. The Hackberry PWA from Alt. C intersects an APS 69 kV power line. The Deadwood Draw PWA from Alt. C has portions of the boundary parallel but just outside of an APS distribution line, and another small portion that intersects the power line. We Request that wilderness be designated outside the power line ROW with an additional buffer beyond the ROW to accommodate the possibility of hazard trees falling on the power line. We also recommend that wilderness boundaries be clearly defined near power lines rather than roughly drawn using mapping software.

Response:

Thank you for pointing out that some of the Recommended Wilderness Areas appeared to include existing utility corridors and thank you for sharing geospatial information on this topic. The boundaries for the Davey's Recommended Wilderness Area (RWA) and the Deadwood Draw has been adjusted to ensure that they do not include existing adjacent utility corridors. The analysis on these RWA has been edited to conform with the adjusted boundaries. If these areas are designated as wilderness, the actual boundaries are determined at that time.

Commenter: Jagels, Ryan

Comment:

LRMP 3 143 Standards for Oak Creek Canyon Management Area #2 Utility companies must have the ability to cut down vegetation within rights-of-way.

Response:

This Oak Creek Management Area standard has been adjusted in response to your comment. The phrase "forest products" has been replaced with the term "commercial plant collection" to clarify that this standard only applies to commercial plant collection. The concern relating to vegetation management associated with utility corridors near riparian areas is also addressed by a Special Uses desired condition that acknowledges the need and legal mandate to manage vegetation in utility and energy corridors. See FW-SpecUse-DC-2.

Commenter: Jagels, Ryan

Comment:

General Ensure that any vegetation removal restrictions such as restricted removal of pine trees >9" diameter in MSO Protected habitat include an exclusion for utility companies allowing treatment of vegetation within utility rights-of-way and treatment of hazards outside of rights-of-way to ensure utility companies have the ability to maintain proper clearances of the utility structures and equipment.

Response:

The Forest Plan has not been adjusted in response to these comments. However, the concern related to vegetation management in utility rights-of-way is addressed in other plan direction in the Special Uses section. Vegetation clearing in utility corridors that meets legal mandates is a desired condition. See FW-SpecUse-DC-2. A guideline further clarifies that vegetation in utility corridors is only retained if it does not interfere with meeting vegetation clearing requirements for the corridor. See FW-SpecUse-G-6. Removal of snags, large ponderosa pine and Gambel oak trees, and ponderosa pine greater than nine inches in diameter in protected Mexican spotted owl habitat could create potential conflicts with the Endangered Species Act or other resources. These conflicts would be worked out at the project level based on site specific information.

Commenter: Jagels, Ryan

Comment:

Alt. D - Increasing the total acres for nonmotorized recreation to 387,764 may decommission existing power line maintenance roads that need to be utilized for the long term operation of the power lines.

Response:

Alternative D is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. Alternative D shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Jagels, Ryan

Comment:

Alt. B - Removing 564 miles of roads may inhibit access for long term maintenance of existing power lines.

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Jagels, Ryan

Comment:

Alt. D - Removing 563 miles of roads may inhibit access for long term maintenance of existing power lines.

Response:

Alternative D is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. Alternative D shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Jagels, Ryan

Comment:

Alt. C - Adding 92,386 acres of WA would have a significant negative impact on APS ability to site future power line corridors to meet customer demand.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such

resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Jagels, Ryan

Comment:

Also, an existing APS 69kV power line crosses the southern end of the Davey's RWA in addition to an existing 12kV power line crossing the western edge of the Deadwood Draw RWA. Operation and maintenance of these existing facilities would be adversely affected

Response:

Thank you for pointing out that some of the Recommended Wilderness Areas appeared to include existing utility corridors and thank you for sharing geospatial information on this topic. The boundaries for the Davey's Recommended Wilderness Area (RWA) and the Deadwood Draw has been adjusted to ensure that they do not include existing adjacent utility corridors. The analysis on these RWA has been edited to conform with the adjusted boundaries. If these areas are designated as wilderness, the actual boundaries are determined at that time.

Commenter: Jagels, Ryan

Comment:

Alt. B - Adding 14,767 acres of WA would negatively impact APS ability to site future power line corridors to meet customer demand.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. 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These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. 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In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such

resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Jagels, Ryan

Comment:

an existing APS 69kV power line crosses the southern end of the Davey's RWA, which would cause significant problems for our long term operations and maintenance of said power line

Response:

Thank you for pointing out that some of the Recommended Wilderness Areas appeared to include existing utility corridors and thank you for sharing geospatial information on this topic. The boundaries for the Davey's Recommended Wilderness Area (RWA) and the Deadwood Draw has been adjusted to ensure that they do not include existing adjacent utility corridors. The analysis on these RWA has been edited to conform with the adjusted boundaries. If these areas are designated as wilderness, the actual boundaries are determined at that time.

Commenter: Jagels, Ryan

Comment:

LRMP 2 115 Guidelines for Scenic Resources #9 Change sentence to "In order to maintain the SIO, utility rights-of-way in areas of moderate scenic integrity should not be widened if possible." Leave out the rest of the sentence. It is typically not possible to increase a power line capacity without expansion of the right-of-way. The clearance requirements for a higher voltage line are greater than for a smaller voltage line.

Response:

The Forest Plan has been adjusted in response to this comment. The Scenery guideline was merged with a similar Special Uses guideline which directs forest managers to consider using or expanding sites and corridors for existing utilities and areas adjacent to road right-of-ways before creating new sites or corridors. See FW-SpecUse-G-8.

Commenter: Jagels, Ryan

Comment:

LRMP 2 83 Energy and Minerals The desired conditions, standards, and guidelines focuses on minerals, but managing for energy from power utility rights-of-way should be included. Vegetation management in these rights-of-way must comply with utility vegetation laws and regulations and should be incorporated in this document.

Response:

The "Minerals and Energy" section has been renamed the "Mineral Resources" section in response to this comment. The "energy" was previously included in the title because this section deals with, among other things, leasable minerals. Many leasable minerals, such as oil, gas, and geothermal resources are sources of energy. This section is not intended to address energy production and transmission facilities. Those forest uses are addressed in the Special Uses section. The Special Uses section contains plan components that acknowledge laws and regulations related to vegetation management in utility rights-of-way. See FW-SpecUse-DC-2 and FW-SpecUse-G-6.

Commenter: Jagels, Ryan

Comment:

DEIS 2 31 Road Closure for Habitat Topic #11 Alt. A - Preferred alternative

Response:

Alternative A is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Jagels, Ryan

Comment:

LRMP 2 39 Guidelines for Riparian Types, #5 Utility corridors should be maintained at early successional plant species. Within the utility right-of-way, tall growing riparian vegetation species at a variety of age classes cannot be maintained. Provide an exclusion for utility rights-of-way on this guideline.

Response:

This guideline has been modified, but a specific exclusion for utility corridors has not been added. See FW-Rip-RipType-G-2. Instead of including individual exceptions in every plan component on vegetation that could impact vegetation management in utility corridors, the Plan the necessity and appropriateness of vegetation management within utility corridors in one of the Special Uses desired conditions. See FW-SpecUse-DC-2. The Wildland-Urban Interface (WUI) section in the Plan also contains plan direction related to vegetation management in WUI. Utility corridors are considered part of the WUI. The potential conflicts between vegetation resources and utility corridor management will be resolved at the project level based on site-specific information.

Commenter: Jagels, Ryan

Comment:

LRMP 2 27 Under Guidelines for Springs Add a stipulation that tall growing vegetation shall not be planted under and around utility lines and any vegetation to be planted under and around utility lines for restoration will be discussed with the utility to ensure no future conflicts would occur with the power lines as a result of this restored vegetation.

Response:

Adding a plan component to the Springs section as suggested would limit the suggested direction to areas with springs. To provide more strategic and comprehensive coverage, one of the desired conditions in the Special Uses section was adjusted to acknowledge the legal mandates that apply to vegetation clearing for utility and energy transmission. See FW-SpecUse-DC-2.

Commenter: Jagels, Ryan

Comment:

LRMP 2 33-34 Objective, Standards, and Guidelines for all Vegetation Types Ensure that the 1,000 acres of aspen and maple restoration does not occur within utility rights-of-way. These species are not compatible with power lines.

Response:

In addition to desired conditions for aspen and maple, the Forest Plan includes a desired condition relating to the legal mandates for vegetation clearing in utility and energy transmission corridors. See FW-TerrERU-AspMpl-DC-1, 2, and 3 and FW-SpecUse-DC-2. A project proposing to pursue aspen or maple restoration within a utility corridor, would need to be consistent with the Special Uses desired condition or it would require a plan amendment. It is highly unlikely that the Forest would use its limited restoration budget on efforts to restore or enhance aspen or maple in areas like utility corridors where the vegetation is being actively managed.

Commenter: Jagels, Ryan

Comment:

LRMP 2 92 Roads and Facilities Add language that ensures that the 200 to 800 roads to be decommissioned are not roads accessing utility rights-of-way and that utilities will maintain the ability to access facilities even if road is closed to the public.

Response:

The Roads and Facilities objective does not make a decision to decommission any particular road on the Forest. Those decisions will be made on site-specific proposal that involve coordination with stakeholders. The Roads and Facilities objective to decommission 200 to 800 miles of unauthorized and system has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. To address the concern about retaining access for utilities, a management approach has been added in the forestwide Roads and Facilities section, which reminds forest managers to: Work closely with utilities to ensure access to rights-of-way and infrastructure.

Commenter: Jagels, Ryan

Comment:

LRMP 2 38 Guidelines for Riparian Types, #4 Add exclusion for utility corridors regarding mesquite bosque fragmentation. While the utilities should consider a multi-stage treatment approach to minimize fragmentation where mesquite bosque vegetation management is necessary within the rights-of-way, there are areas of mesquite bosque within utility corridors that are not compatible with utility clearance needs.

Response:

This guideline has been modified in response to your comment, but a specific exclusion for utility corridors has not been added because of potential conflicts with the Endangered Species Act or other resources. See FW-Rip-RipType-G-2. The Forest recognizes the necessity and appropriateness of vegetation management within utility corridors in one of the Special Uses desired conditions. See FW-SpecUse-DC-2. The Wildland-Urban Interface (WUI) section in the Plan also contains plan direction related to vegetation management in WUI. Utility corridors are considered part of the WUI. The potential conflicts between species and vegetation resources and utility corridor management will be resolved at the project level based on site-specific information.

Commenter: Jagels, Ryan

Comment:

LRMP 2 100 Guidelines for Special Uses #7 Include economic concerns as a viable concern that can prevent the burial of utility lines.

Response:

Several plan components have been modified to address these concerns. This desired condition in the forestwide Special Uses section that addresses the impacts of utility and energy transmission corridors on the forest has been modified to address this concern and clarify its overall intent. Some commenters expressed concern with what appeared to be a general requirement to bury all infrastructure within these corridors, which can raise economic and environmental concerns. Other commenters expressed support for burying all infrastructure in these corridors and asked that vegetation clearing for these corridors be kept to a minimum. After considering all of these comments, the desired condition was adjusted to make it clear that its goal is for this type of infrastructure to not be visible across the landscape, rather than defaulting to burying it. The desired condition has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this type of infrastructure. See FW-SpecUse-DC-3. The corresponding guideline in the Special Uses section that addresses burial of utility lines has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this utility lines. See FW-SpecUse-G-9. With regard to vegetation management, a Special Use desired condition was adjusted to acknowledge that there are legal mandates associated with the vegetation clearing for these corridors and it is a desired condition to meet those legal mandates. See FW-SpecUse-DC-2. While this desired condition recognizes that there is a level of vegetation clearing that is necessary for the safe operation of these corridors, it also recognizes the desire of moving towards other desired conditions applicable to the area. This includes the desired conditions for scenery. To support this desired condition, the forestwide Special Uses section has retained a guideline that requires the retention of vegetation that does not need to be cleared to meet legal mandates to allow screening for scenery, habitat for species, and corridors for wildlife movement. See FW-SpcUse-G-6. Concerns about co-locating infrastructure in an existing corridor before a new corridor is considered were addressed in several plan components in the forestwide Special Uses and Scenery sections. To consolidate this direction in one plan component, the guideline in the forestwide Scenery section that was designed to prevent the widening of utility rights-of-way in areas that have a moderate scenic integrity objective was merged with a similar direction in the forestwide Special Uses section. See FW-SpecUse-DC-3. Whether the additional infrastructure should be buried is addressed by the plan components discussed above.

Commenter: Jagels, Ryan

Comment:

LRMP 2 50-51, 56 Guidelines for Pinyon-Juniper, Ponderosa pine When igniting fires in the vicinity of power lines for vegetation restoration efforts, the utility fire liaisons should be contacted. Fire under and around utility lines and structures may be a hazard and should be avoided except under consultation with the utility company.

Response:

The Forest Plan includes a management approach in the Fire Management section that reminds forest managers to: Coordinate with other jurisdictions such as communities, service providers (infrastructure), and Federal, State, county, and local entities regarding prevention, preparedness, planned activities, and responses to wildland fires. Notify the above regarding the upcoming and ongoing fire season and any prescribed fire activity.

Commenter: Jagels, Ryan

Comment:

LRMP 2 51 Guidelines for Pinyon-Juniper Any seeding within utilities rights-of-way should only be done under consultation with the utility company to ensure seeded vegetation is compatible with utility lines and structures.

Response:

The Forest Plan has been adjusted in response to this suggestion. Rather than add a specific guideline to the Pinyon Juniper ERU section of the Forest Plan, a management approach was added to the All Ecosystems section, which ensures broader consideration of the stated concern instead of limiting it to the Pinyon Juniper ERU. The All Ecosystems management approach states: Coordinate with neighboring jurisdictions, permit holders (including utilities and livestock permittees), and other interested parties when undertaking activities in permitted areas or easements.

Commenter: Jagels, Ryan

Comment:

LRMP 2 56 Guidelines for Ponderosa Pine #3 Provide exclusion clause to power utility companies regarding retaining of class 3 and 4 ponderosa pines. Within utility rights-of-way, these trees are not compatible with clearance requirements for power lines and structures. Outside of rights-of-way, dead, diseased, leaning, co-dominant, or otherwise compromised ponderosa pines can pose a hazard to utility power lines and structures.

Response:

The Forest Plan has not been adjusted in response to these comments. However, the concern related to vegetation management in utility rights-of-way is addressed in other plan direction in the Special Uses section. Vegetation clearing in utility corridors that meets legal mandates is a desired condition. See FW-SpecUse-DC-2. A guideline further clarifies that vegetation in utility corridors is only retained if it does not interfere with meeting vegetation clearing requirements for the corridor. See FW-SpecUse-G-6. Removal of snags, large ponderosa pine and Gambel oak trees, and ponderosa pine greater than nine inches in diameter in protected Mexican spotted owl habitat could create potential conflicts with the Endangered Species Act or other resources. These conflicts would be worked out at the project level based on site specific information.

Commenter: Jagels, Ryan

Comment:

LRMP 2 56 Guidelines for Ponderosa Pine #4 Provide exclusion clause to power utility companies regarding retaining of large Gambel oak trees. Within utility rights-of-way, these trees are not compatible with clearance requirements for power lines and structures. Outside of rights-of-way, dead, diseased, leaning, or otherwise compromised Gabel oak can pose a hazard to utility power lines and structures.

Response:

The Forest Plan has not been adjusted in response to these comments. However, the concern related to vegetation management in utility rights-of-way is addressed in other plan direction in the Special Uses section. Vegetation clearing in utility corridors that meets legal mandates is a desired condition. See FW-SpecUse-DC-2. A guideline further clarifies that vegetation in utility corridors is only retained if it does not interfere with meeting vegetation clearing requirements for the corridor. See FW-SpecUse-G-6. Removal of snags, large ponderosa pine and Gambel oak trees, and ponderosa pine greater than nine inches in diameter in protected Mexican spotted owl habitat could create potential conflicts with the Endangered Species Act or other resources. These conflicts would be worked out at the project level based on site specific information.

Commenter: Jagels, Ryan

Comment:

LRMP 2 56 Guidelines for Ponderosa Pine #5 Snags tall enough to fall on power lines or structures are potential hazards to the lines. Utilities must retain the ability to remove snags

Response:

The Forest Plan has not been adjusted in response to these comments. However, the concern related to vegetation management in utility rights-of-way is addressed in other plan direction in the Special Uses section. Vegetation clearing in utility corridors that meets legal mandates is a desired condition. See FW-SpecUse-DC-2. A guideline further clarifies that vegetation in utility corridors is only retained if it does not interfere with meeting vegetation clearing requirements for the corridor. See FW-SpecUse-G-6. Removal of snags, large ponderosa pine and Gambel oak trees, and ponderosa pine greater than nine inches in diameter in protected Mexican spotted owl habitat could create potential conflicts with the Endangered Species Act or other resources. These conflicts would be worked out at the project level based on site specific information.

Commenter: Jagels, Ryan

Comment:

LRMP 2 74 Guidelines for Wildlife, Fish, and Plants #4 Revise to: "Seasonal timing restrictions should be applied whenever reasonable and prudent for ..." Some utility actions, such as hazard tree removal, repairing damaged equipment, and any other action of a hazard or emergency situation sometimes cannot be conducted within timing restriction parameters.

Response:

This guideline has been adjusted to refer to "timing restrictions" instead of "seasonal timing restrictions." This change provides greater flexibility for projects to design timing restrictions based on site-specific information, such as the activity and species involved. For example, depending on the activity and potentially impacted species, a restriction on activities during a particular time of day may be sufficient instead of a restriction on an entire season. This guideline has also been adjusted to provide greater protection for listed species. This was achieved by separating the guideline into a standard that addresses listed species and a guideline that applies to Southwestern Region sensitive species and pronghorn. See FW-WFP-S-2 and FW-WFP-G-8. A management approach has been added to the Wildlife, Fish, and Plants section to remind forest managers that: The application of seasonal timing restrictions is site-specific and may vary depending on variables such as species, weather, timing of activity relative to species life cycle, or duration, frequency, and type of activities that are occurring in the species' habitat. Other variables to be considered could include the duration, extent, and intensity of the proposed activity, or the type of activity itself, such as emergency or safety related actions versus non-emergency activities. The best available information and science is utilized to develop seasonal restrictions to reduce impacts to disturbance sensitive species. Despite these changes, the application of timing restrictions would still occur on a site specific basis.

Commenter: Jagels, Ryan

Comment:

LRMP 2 75 Guidelines for Wildlife, Fish, and Plants #9 Define "all equipment". Also define where this is applicable? Would this apply to road/water crossings? Or just work in water bodies that occurs off-road? From a utility perspective, we believe this should apply only for off-road work in water body.

Response:

These guidelines have been removed from the Forest Plan because their intent is addressed in the Invasive Species section. See FW-Invas-G-1. The guideline in the Invasive Species section is written to have more strategic application, with the precise details of how to prevent infestations being determined at the project level based on the specifics associated with the project. As a forest wide component, this guideline applies to all projects and activities where control of invasive species is identified as a concern. The Invasive Species section also has a management approach reminding forest managers to think about the role vehicles, equipment, personnel, and materials can play in the accidental introduction and spread of invasive species. It states: Encourage the prevention of accidental introduction and spread of invasive species carried by contaminated vehicles, equipment, personnel, or materials (including plants, wood, plant/wood products, water, soil, rock, sand, gravel, mulch, seeds, grain, hay, straw, animal feeds, or other materials).

Commenter: Jagels, Ryan

Comment:

LRMP 2 77 Guidelines for Invasive Species #3 Define "All equipment". This should not apply to passenger vehicles or trucks. Define where this protocol applies - for projects occurring off-road, or even when equipment remain on existing roads? We do not believe this is necessary when equipment remains on Authorized roads.

Response:

These guidelines have been removed from the Forest Plan because their intent is addressed in the Invasive Species section. See FW-Invas-G-1. The guideline in the Invasive Species section is written to have more strategic application, with the precise details of how to prevent infestations being determined at the project level based on the specifics associated with the project. As a forest wide component, this guideline applies to all projects and activities where control of invasive species is identified as a concern. The Invasive Species section also has a management approach reminding forest managers to think about the role vehicles, equipment, personnel, and materials can play in the accidental introduction and spread of invasive species. It states: Encourage the prevention of accidental introduction and spread of invasive species carried by contaminated vehicles, equipment, personnel, or materials (including plants, wood, plant/wood products, water, soil, rock, sand, gravel, mulch, seeds, grain, hay, straw, animal feeds, or other materials).

Commenter: Jagels, Ryan

Comment:

LRMP 2 99 Guidelines for Special Uses #1 and #2 Include a clause that these guidelines would be follow as long as utility clearance requirements are met.

Response:

The concern related to vegetation management in utility rights-of-way is addressed in other plan direction in the Special Uses section. Vegetation clearing in utility corridors that meets legal mandates is a desired condition. See FW-SpecUse-DC-2. A guideline further clarifies that vegetation in utility corridors is only retained if it does not interfere with meeting vegetation clearing requirements for the corridor. See FW-SpecUse-G-6.

Commenter: Jagels, Ryan

Comment:

LRMP 2 84-91 Heritage Resources The Heritage section of the CNF DLRMP would benefit from a more detailed explanation of the compliance process being implemented on the Forest. APS has often felt that the treatment of Heritage resources on the Forest has been something of a moving target. While we recognize that CNF staff maintains a degree of discretionary-decision making regarding the protection of Heritage resources on the Forest, a better-defined process would be extremely helpful in our planning and in making an internal business case to justify expenses related to Heritage resources. For example, some regions, areas, or site types on the Forest appear to receive special consideration in the compliance process, but we are not totally clear on the logic behind these decisions, though we know site density is an important factor. Although the locations of heritage site locations and traditional cultural properties are restricted, we would appreciate it if the CNF would be more forthcoming in generally defining and sharing areas of particular Heritage concerns with the public and project proponents. This could include Priority Heritage Assets, Historic Districts, areas of high heritage site density, etc. The CNF could also better define its rationale for which sites or site types receive special consideration beyond National Register of Historic Places Eligibility. What constitutes an "imminent risk or threat" to site integrity, which values make a site "rare or unique" (pp. 85-86)? As an example, APS is still unclear as to why heritage resource surveys required in some areas of the Forest in advance of proposed activities that are not ground disturbing but allowed to proceed in other areas. We do not necessarily disagree with the need for these surveys, but clearing up some of the ambiguity of the language in this document would help us to better understand the need and internally justify costs.

Response:

In general, heritage compliance is guided by numerous laws, regulations, and policies. Applicable regulations would vary by the project and what heritage resources are potentially affected. Regulations are listed in Appendix D under 'Heritage Resources, Tribal Relations, and Uses'. To help add consistency across Forest Service administrative boundaries, a management approach has been added to the Special Uses section reminding forest managers: Since some utility facilities traverse National Forest System lands administered by more than one ranger district within the Coconino NF, the forest will coordinate with utility companies in the development of regular operating plans to document agreements and activities along these corridors for consistent and seamless decisions where appropriate, that can be integrated along whole linear rights-of-way or utility corridors.

Commenter: Jagels, Ryan

Comment:

LRMP 2 38 Guidelines for Riparian Types, #3 Include utility corridors in the guideline exclusions. Within these corridors there are some areas where woody vegetation is not compatible with power lines.

Response:

The Riparian guideline you have referred to addresses potential grazing impacts to riparian areas. To emphasize that point, the guideline has been moved to the Livestock Grazing section. However, your concern relating to vegetation management associated with utility corridors near riparian areas is addressed by a Special Uses desired condition that acknowledges need and legal mandate to manage vegetation in utility and energy corridors. See FW-SpecUse-DC-2.

Commenter: Jagels, Ryan

Comment:

LRMP 2 97 Desired Conditions for Special Uses #2 Include economic concerns as a viable concern that can prevent the burial of utility lines.

Response:

Several plan components have been modified to address these concerns. This desired condition in the forestwide Special Uses section that addresses the impacts of utility and energy transmission corridors on the forest has been modified to address this concern and clarify its overall intent. Some commenters expressed concern with what appeared to be a general requirement to bury all infrastructure within these corridors, which can raise economic and environmental concerns. Other commenters expressed support for burying all infrastructure in these corridors and asked that vegetation clearing for these corridors be kept to a minimum. After considering all of these comments, the desired condition was adjusted to make it clear that its goal is for this type of infrastructure to not be visible across the landscape, rather than defaulting to burying it. The desired condition has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this type of infrastructure. See FW-SpecUse-DC-3. The corresponding guideline in the Special Uses section that addresses burial of utility lines has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this utility lines. See FW-SpecUse-G-9. With regard to vegetation management, a Special Use desired condition was adjusted to acknowledge that there are legal mandates associated with the vegetation clearing for these corridors and it is a desired condition to meet those legal mandates. See FW-SpecUse-DC-2. While this desired condition recognizes that there is a level of vegetation clearing that is necessary for the safe operation of these corridors, it also recognizes the desire of moving towards other desired conditions applicable to the area. This includes the desired conditions for scenery. To support this desired condition, the forestwide Special Uses section has retained a guideline that requires the retention of vegetation that does not need to be cleared to meet legal mandates to allow screening for scenery, habitat for species, and corridors for wildlife movement. See FW-SpcUse-G-6. Concerns about co-locating infrastructure in an existing corridor before a new corridor is considered were addressed in several plan components in the forestwide Special Uses and Scenery sections. To consolidate this direction in one plan component, the guideline in the forestwide Scenery section that was designed to prevent the widening of utility rights-of-way in areas that have a moderate scenic integrity objective was merged with a similar direction in the forestwide Special Uses section. See FW-SpecUse-DC-3. Whether the additional infrastructure should be buried is addressed by the plan components discussed above.

Commenter: Jagels, Ryan

Comment:

LRMP 2 98 Desired Conditions for Special Uses #3 Change "raptor use" to "avian use"

Response:

This sentence has been merged similar direction in one of the special uses guidelines. To provide for broader application, it has been adjusted to refer to "wildlife" instead of "raptors." See FW-SpecUse-G-5. A full reference to Avian Power Line Interaction Committee (APLIC) has been added to the Special Uses section in Appendix D, Other Sources of Information. This reference is also located in the Wildlife, Fish, and Plant section in Appendix D.

Commenter: Jagels, Ryan

Comment:

LRMP 2 56 Guidelines for Ponderosa Pine #6 For utility vegetation maintenance, avoiding work during April to June is not always possible. Add some exceptions or alternatives that still minimize impacts from bark beetle but provides to ability to continue work during the April to June season if necessary.

Response:

This guideline has been adjusted in response to this comment. The language has been adjusted to have broader, more strategic application and focuses on uncharacteristic bark beetle outbreaks. See FW-TerrERU-PP-G-6. Site-specific conditions rather than broad timing restrictions would be used to manage levels of green slash. A similar guideline has been added to the Pinyon Juniper ERU section. See FW-TerrERU-PJ-G-3.

Commenter: Jay, Anon

Comment:

I want to hear of massive reductions in salaries of management personnel due to vast reductions in their responsibilities.

Response:

Staffing levels are outside the scope of the forest plan.

Commenter: Jay, Anon

Comment:

I strongly object to any more changes to the forest plan. No more road closures. No more closing access to the forest by handicap Americans. No more stealing lands from the people so you can provide the developers with more opportunities to make millions.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: Joe, Tony

Comment:

After reviewing your consultation documents, NNRPD-TCP has concluded the undertaking/project will not impact Navajo traditional cultural resources. The NNHPD-TCP, on behalf of the Navajo Nation has no concerns at this time.

Response:

Thank you for your response. The Forest acknowledges the importance of cooperating with tribes and incorporating their perspectives, concerns, and traditional knowledge into management decisions. See the Tribal Relations and Uses section of the Forest Plan for management direction on this subject.

Commenter: Joe, Tony

Comment:

However the determination made by the NNHPD-TCP does not necessarily mean that the Navajo Nation has no interests or concerns with the proposed project. The NNHPD-TCP would appreciate a hard copy of the Forest Plan Revision as soon as it is available. If the proposed project inadvertently discovers habitation sites, plant gathering areas, human remains and objects of cultural patrimony, the NNHPD TCP request that we be notified respectively in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). The Navajo Nation claims cultural affiliation to all Anasazi people (periods from Archaic to Pueblo IV) of the southwest. The Navajo Nation makes this claim through Navajo oral history and ceremonial history, which has been documented as early as 1880 and taught from generation to generations.

Response:

The Forest Plan is, by design, strategic in nature. It does not include project level decisions that could result in the inadvertent discovery of habitation sites, plant gathering areas, human remains, or objects of cultural patrimony. Those decisions are made later, only after specific proposals are identified and analyzed and there is the opportunity for tribal and public involvement. Human remains are addressed through NAGPRA by the Forest Archaeologist. This is separate from Forest Plan as the Forest Plan does not repeat law, regulation or policy.

Commenter: Keeler, Ray

Comment:

In Management Approaches, a second cave management guide reference also needs to be included ... since this is management ... Caves karst and pseudokarst are managed consistent with the Coconino National Forest Cave and Karst Management Guide.

Response:

A management approach has been added to the Geological Features section in response to your comment. The management approach states: Utilize current cave management plans and guides. No specific cave management plan or guide was identified because those documents can change over time. This management approach provides a reminder to seek out and consider plans and guides that are in effect at the time. The Coconino National Forest Cave and Karst Management Guide is mentioned by name in Appendix D of the revised Plan.

Commenter: Keeler, Ray

Comment:

Coconino NF has many significant caves, including lava tubes. Coconino NF has thousands of acres of karst topography. Karst is fragile. Karst includes sinking streams, sinks, and caves. Cave entrances are Karst features. Please include "karst" and "pseudokarst" when presenting cave related management. Caves are a subset of karst. Coronado NF's Forest Plan draft defines Karst as: Karst resources: The elements of a karst landscape, commonly characterized by losing streams, sinkholes, collapse features, caves, or springs. These may not only be physical features, but may also relate to karst groundwater systems, system(s) function, and biological significance to the vegetative, wildlife, and aquatic communities. Wikipedia defines Pseudokarst as: Pseudokarsts are similar in form or appearance to karst features but are created by different mechanisms. Examples include lava caves and granite.

Response:

In response to this comment, two paragraphs discussing karst and pseudokarst have been added to the General Description and Background section for Geological Features section of the Forest Plan. Definitions for "karst" and "pseudokarst" have also been added to the Glossary for the Forest Plan.

Commenter: Keeler, Ray

Comment:

In Guidelines for Livestock Grazing include "karst features" as sensitive features.

Response:

The guideline has not been adjusted to specifically list "karst features" as suggested by the comment. See FW-Graz-G-5. However, karst features could be recognized as a sensitive feature for the purposes of this guideline. Karst features are more comprehensively addressed in the Geological Features section. Desired conditions in that section seek to maintain natural conditions and reduce disturbance related to human activities. See FW-BioPhys-Geo-DC-1. A desired condition for karst features promotes karst landscapes and cave formations that continue to develop or erode under natural conditions. See FW-BioPhys-Geo-DC-2. Guidelines ensure that livestock grazing and other projects and activities are designed and managed to maintain the integrity and function of karst features and to prevent siltation into sinkholes and cave entrances. See FW-BioPhys-Geo-G-1 and 2. The Livestock Grazing section also includes a guideline directing livestock grazing to be managed to meet, or move towards, the desired conditions for other forest resources. See FW-Graz-G-2.

Commenter: Keeler, Ray

Comment:

In Vegetation starting on page 32: FW-Veg-All-DC Include caves/karst/pseudokarst to the unique plant community habitats. Cave entrances are inter ecotone access points.

Response:

The Forest Plan has been adjusted in response to this comment. Caves and karst have been added to the list of examples of physical elements discussed in the desired condition. See FW-WFP-DC-5. The listed examples are not intended to be an exhaustive list of all possible physical elements.

Commenter: Keeler, Ray

Comment:

In Paleontological Resources starting on page 30: FW-BioPhys-Paleo-G Add list item: No collecting of paleontological resources is allowed in cave without a forest research permit.

Response:

This guideline has been adjusted to address part of your concern. Caves have been added to the list of areas that may be closed to collecting. See FW-BioPhys-Paleo-G-2. An unconditional closure of caves to collecting, as suggested by your comment, has not been incorporated into the revised Plan. The regulations found at 36 CFR Part 291 (Paleontological Resources Preservation) and the desired conditions and guidelines in the Paleontological Resources subsection of the Biophysical Resources section of the revised Plan provide direction on when closure of a specific area would be warranted. That is the type of site-specific decision that is not being made in the revised Plan.

Commenter: Keeler, Ray

Comment:

In Spring Ecosystems starting on page 26: FW-Aq-Spr-DC Add list item: A few springs are karst features and need buffer zones to which maintain minimal disturbance.

Response:

The Forest Plan includes direction to identify and maintain buffers, called aquatic management zones, in riparian areas (streams, wetlands, and springs) to avoid detrimental changes that would seriously and adversely affect water conditions, fish habitat or connected downstream cave, karst, and lava tube resources. See FW-Rip-All-G-3. Aquatic management zones would also be established in non-riparian, intermittent streamcourses to maintain channel functioning, downstream water quality, riparian habitat, and function. See FW-Rip-Strm-G-2.

Commenter: Keeler, Ray

Comment:

FW-Aq-Strm-DC Add list item: Sinking streams maintain minimal disturbance and buffer zones.

Response:

A specific desired condition relating to "sinking streams" has not been added. However, the General Description and Background for the Geological Features section has been modified to specifically highlight sinking streams and the General Description and Background for the Stream Ecosystems section has been modified to direct the reader to the Geological Features section for sinking streams. A guideline requires aquatic management zones to be applied to streamcourses to maintain conditions in connected or downstream caves or karst. See FW-BioPhys-Geo-G-8 which reads: Aquatic management zones or best management practices should be applied to perennial, intermittent, or ephemeral streamcourses, to maintain the chemical, physical, and biological conditions of connected or downstream caves, karst, and lava tubes. There is also plan direction related to aquatic management zones in the All Riparian and Stream Ecosystems subsections of the Riparian Areas section. See FW-RipAll-G-3 and FW-Rip-Strm-G-2.

Commenter: Keeler, Ray

Comment:

In Stream Ecosystems starting on page 21: Add wording for Sinking streams - there are at least two on the Coconino going into caves. Both are intermittent streams, and the karst areas are several hundreds of acres each. Adequate wording might be: Intermittent and ephemeral sinking streams are karst features and provide nutrients for cave ecosystems. The sensitive microhabitats are affected by surface disturbance.

Response:

A specific desired condition relating to "sinking streams" has not been added. However, the General Description and Background for the Geological Features section has been modified to specifically highlight sinking streams and the General Description and Background for the Stream Ecosystems section has been modified to direct the reader to the Geological Features section for sinking streams. A guideline requires aquatic management zones to be applied to streamcourses to maintain conditions in connected or downstream caves or karst. See FW-BioPhys-Geo-G-8 which reads: Aquatic management zones or best management practices should be applied to perennial, intermittent, or ephemeral streamcourses, to maintain the chemical, physical, and biological conditions of connected or downstream caves, karst, and lava tubes. There is also plan direction related to aquatic management zones in the All Riparian and Stream Ecosystems subsections of the Riparian Areas section. See FW-RipAll-G-3 and FW-Rip-Strm-G-2.

Commenter: Keeler, Ray

Comment:

Other sections in the document need to reference the Biophysical Features section in the "Related Plan Content ..." references. Some sections that already reference cave and karst related items need to be updated or included in the following sections: Section - Related Plan Content ... Action Related Plan Content for Paleontological Resources Update Caves, to Biophysical Features to Caves/Karst/Pseudokarst Related Plan Content for Alpine Tundra Update Caves, to Biophysical Features to Caves/Karst/Pseudokarst Management Approaches for Soil Add reference to Biophysical Features Caves/Karst/Pseudokarst Related Plan Content for Stream Ecosystems Add reference to Biophysical Features Caves/Karst/Pseudokarst Related Plan Content for Springs Add reference to Biophysical Features Caves/Karst/Pseudokarst Related Plan Content for Vegetation Add reference to Biophysical Features Caves/Karst/Pseudokarst

Response:

The "Related Plan Content" sections have been removed from the Forest Plan to remove the appearance that they put forth a complete listing of other related plan content. As with the 1987 Forest Plan, it is necessary to read all of the plan components when implementing the Forest Plan. In general, components are grouped together by resource or program area. For example, most direction on the management of soil will be found in the Soil section and not repeated in other sections. However, there are instances where placing in another section makes the most sense. For example, plan components that affect certain types of bat habitat may be in the Geological Features section, instead of in the Wildlife, Fish, and Plants section, because the plan components only come into plan if particular geological resources are present. See FW-BioPhys-Geo-3.

Commenter: Keeler, Ray

Comment:

Add a list item: Retain records for caves/karst/pseudokarst at Forest Services offices when they need to be accessed regularly for research purposes. Maintain electronic records, including an index of documents research value.

Response:

The Forest Plan has been adjusted in response to this comment. A management approach regarding cave records has been added to the Geological Features section. It reminds forest managers to: Keep cave locations confidential except for caves that have been identified for recreational use. Cave records are managed at forest service locations where they are kept secured.

Commenter: Keeler, Ray

Comment:

In FW-BioPhys-Geo-DC #4 , add hydrological to the list. It is not good to prevent non-turbid water from flowing underground. i.e. aquifer recharge. It is good to prevent siltation.

Response:

The desired condition has been adjusted to incorporate your suggestion. See FW-BioPhys-Geo-DC-1. In addition, siltation is addressed in FW-BioPhys-Geo-G-2, and 8.

Commenter: Keeler, Ray

Comment:

Leave the cave/karst buffer zone at 300 feet. The cave management guide lists a 300 foot karst buffer Siltation reduction by livestock grazing in karst areas, especially with open entrances, sinking streams, and sinkhole, is a primary, mitigating, management action.

Response:

The Geological Features guideline has been adjusted in response to this comment. The buffer zone that should be applied to protect cave resources was changed from 200 feet to 300 feet and siltation is specifically mentioned. The guideline also specifically notes that site-specific adjustments can be made based on topography, drainage, soil type, and the expected impact of the proposed activity. See FW-BioPhys-G-2.

Commenter: Keeler, Ray

Comment:

On page 28, 3rd paragraph add caving as a recreational activity dependent on biophysical features.

Response:

The types of recreational opportunities available on the Forest are discussed in the General Description and Background for all Recreation. Spelunking has been listed as a specific recreational opportunity and caves have been listed as an area that can provide recreational experiences. The potential impacts to cave resources that could occur from this recreational activity are addressed in several plan components. See FW-BioPhys-Geo-1, 3, and 5; FW-BioPhys-Geo-S-1; FW-BioPhys-Geo-G-1, 2, 6, and 7; FW-Rec-All-DC-7; FW-Rec-All-G-1 and 2. See also Management Approaches in the FW-BioPhys-Geo section, which remind forest managers to: Encourage partnerships with organizations, scientists, and outdoor recreationists to secure, preserve, and protect forest biophysical features and their resources. Utilize current cave management plans and guides. Foster collaboration with the U.S. Fish and Wildlife Service, Bat Conservation International, Arizona Game and Fish Department, the National Speleological Society, and other stakeholders to address conservation, interpretation, and education management for cave dependent species and associated resources. For example, this collaboration could assist with understanding the cause and transmission of WNS (which is not currently well understood) or with the development and implementation of cave and karst management plans. Keep cave locations confidential except for caves that have been identified for recreational use. Cave records are managed at forest service locations where they are kept secured. Maintain a current list of significant caves on the forest and nominate new significant caves when identified. Monitor significant caves or other biophysical features to determine visitor impacts and the conditions of key resources. Educate the public about the unique ecological and aesthetic value of biophysical features including safety, etiquette, disease prevention, and resource protection.

Commenter: Keeler, Ray

Comment:

The Biophysical Features section needs to include reference to the Coconino National Forest Cave and Karst Management Guide (listed on page 248 of the plan). This can be accomplished by adding a FW-BioPhys-Geo-G list item of: Caves karst and pseudokarst are managed consistent with the Coconino National Forest Cave and Karst Management Guide. The reference needs to be in the page 29 FW-BioPhys-Geo-G section because list item 1 provides the karst buffer size

Response:

A management approach has been added to the Geological Features section in response to this comment. It reminds forest managers to: Utilize current cave and karst management plans and guides. The Coconino National Forest Cave and Karst Management Guide is not specifically referenced because it is still in draft form. When it is finalized, this management approach will remind forest managers of this resource.

Commenter: Keeler, Ray

Comment:

Rename the following Biophysical Features sub-section names to reflect the above change: Current Name Preferred Name Caves, Cliffs, and Talus Slopes Caves/Karst/Pseudokarst, Cliffs, and Talus Slopes General Description and Background for Caves, Cliffs, and Talus Slopes General Description and Background for Caves/Karst/Pseudokarst, Cliffs, and Talus Slopes Desired Conditions for Caves, Cliffs, and Talus Slopes Desired Conditions for Caves/Karst/Pseudokarst, Cliffs, and Talus Slopes Guidelines for Caves, Cliffs, and Talus Slopes Guidelines for Caves/Karst/Pseudokarst, Cliffs, and Talus Slopes Management Approaches for Caves, Cliffs, and Talus Slopes Management Approaches for Caves/Karst/Pseudokarst, Cliffs, and Talus Slopes Related Plan Content for Caves, Cliffs, and Talus Slopes Related Plan Content for Caves/Karst/Pseudokarst, Cliffs, and Talus Slopes

Response:

The name of one of the Biophysical Features subsections in the Forest Plan has been adjusted in response to this comment. The subsection is now called "Geological Features." The terms "karst" and "pseudokarst" are discussed in General Description and Background of the Geological Features section. The old name of this section has been replaced with the new name throughout the Forest Plan.

Commenter: Keeler, Ray

Comment:

Page 27 In Biophysical Features, rename the Section from "Caves, Cliffs, and Talus Slopes" to "Caves/Karst/Pseudokarst, Cliffs, and Talus Slopes"

Response:

The name of one of the Biophysical Features subsections in the Forest Plan has been adjusted in response to this comment. The subsection is now called "Geological Features." The terms "karst" and "pseudokarst" are discussed in General Description and Background of the Geological Features section. The old name of this section has been replaced with the new name throughout the Forest Plan.

Commenter: Keeler, Ray

Comment:

The Forest Plan, page 248, refers to the Coconino National Forest Cave Resource Management Guide as a referenced document. Please title the document Coconino National Forest Cave and Karst Management Guide. Coconino NF land managers Charlotte Minor and Polly Haessig are actively updating the document with volunteers.

Response:

The name of the reference document has been edited as suggested.

Commenter: Keeler, Ray

Comment:

Include "Karst" as a Land Use Designation. With the understanding that obtaining a separate karst land use designation is unlikely, achieving karst management awareness is still needed.

Response:

No change has been made in response to this comment for several reasons. First, the Forest Plan does not use "land use designations" for any other resources. Rather, it is organized to provide forestwide direction on resources wherever they occur. The Forest Plan also contains plan decisions and other content that is only applicable to specific areas, in addition to forestwide direction. Including karst as a land use designation would be the equivalent of creating area specific direction for karst. The problem with this approach is that any karst that is not within the karst land use designation area would not be covered by the plan components for that area. To provide protection of and proper management for karst wherever it occurs on the Forest, the Forest Plan includes forestwide direction for karst in the Geological Features section. See FW-BioPhys-Geo-DC 1, 2, 3 and G-1 and 8.

Commenter: Keeler, Ray

Comment:

In the Biophysical Features General Description add a short definition of "karst". The definition of 'cave is included in the first paragraph.

Response:

In response to this comment, two paragraphs discussing karst and pseudokarst have been added to the General Description and Background section for Geological Features section of the Forest Plan. Definitions for "karst" and "pseudokarst" have also been added to the Glossary for the Forest Plan.

Commenter: Keeler, Ray

Comment:

In FW-BioPhys-Geo-DC #7 , add caving to the recreational activities list.

Response:

This desired condition in the Geological Features section has been adjusted in response to this comment. Rather than mentioning "caving" along with other recreational activities listed in the desired condition, the language in the desired condition was adjusted to have more strategic application. The desired condition now states that biophysical features are generally undisturbed by human activities, which would include caving and other recreational activities. See FW-BioPhys-Geo-DC-1.

Commenter: Kell, Patrick

Comment:

Not all trails can be all things to all people. Shared use works for many experiences and are frequently the most efficient use of resources. However, making all trails shared use limits the experiences such that some of the truly amazing experiences are repressed to the point that the experience is lost. The best trail systems allow for a diversity of trails optimized to provide for different experiences, modalities, and levels of skill development and challenge.

Response:

The Forest Plan contains direction that addresses this comment. A guideline in the Trails and Trailheads section requires trails and trailheads to be designed, built, rerouted, or maintained utilizing current best practices that promote sustainable trail surfaces, prevent conflicts with neighboring lands, address impacts to other resources, and consider user experiences. See FW-Rec-Trails-G-1. Furthermore, a guideline in the All Recreation sections requires recreational activities, locations, and/or settings to be designed and managed to maintain or move towards desired conditions for other uses and resources. See FW-Rec-All-G-1.

Commenter: Kell, Patrick

Comment:

Special Uses The plan states: "Identify preapproved sites for recreation events and large group gatherings on the Red Rock and Flagstaff Ranger Districts." We support the identification of sites where mountain bike events are appropriate on the Coconino National Forest. Events that planned in such a way to have minimal impacts on the surrounding natural resources; mitigation measures are in place to rehabilitate disturbed areas; and other trail user groups are not unduly impacted. Bicycle and other events can have substantial and much needed positive effect on local business both directly related to the activity and those that serve the general needs of visitors.

Response:

Identifying sites for particular recreation events is not a plan-level decision. This is addressed at the project-level on a case-by-case basis. The Forest Plan provides guidance for these project-level decisions. For example, the Special Uses section lists recognizes that sites for recreation events are part of the Forest's desired conditions. See FW-SpecUse-DC-9. The Forest Plan also includes an objective to approve at least 4 sites for recreation events and large group gatherings within 10 years of plan approval. See FW-SpecUse-O-1.

Commenter: Kell, Patrick

Comment:

Recommended Wilderness We can support Wilderness recommendations where the character of the landscape meets the criteria without the need to eliminate nonconforming uses and where the management prescriptions do not alter the necessary political conversation by managing agency recommended Wilderness as if it were congressionally designated Wilderness. Of the three recommended Wilderness areas we support Strawberry Crater and Davey's areas but we oppose the recommended Walker Mountain Wilderness Area, to the east of Camp Verde. The Walker Mountain Area includes an existing network of legal system single-track trails (including the Walker Basin Trail), along with an extensive network of dirt roads, which are currently open to bicycles. This area provides a rare semi-primitive mountain bike experience that many riders seek. We feel that locally, regionally and nationally these types of backcountry riding experiences are currently seeing a cumulative loss, and as such we request that this existing access is maintained. The EIS should note the presence of these roads and trails and the value of this remote backcountry experience to mountain bicyclists. We would support a conservation designation and corresponding management prescriptions that preserved the existing conditions of this landscape without eliminating bicycle use.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in

the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Kell, Patrick

Comment:

The Guidelines for Dispersed Recreation 13 makes reference to trail density without specific quantification of density statistics. So long as this is measured in a qualitative site specific analysis as opposed to measured against a frequently arbitrary quantification it can be a useful metric for trail planning.

Response:

The Dispersed Recreation guideline that addressed trail density (FW-Rec-Disp-G-13) was inadvertently included in the draft plan. An errata circulated with the draft plan noted that the guideline should be deleted.

Commenter: Kell, Patrick

Comment:

By designing and developing trails that provide visitor experiences that are in demand visitors will assist as volunteers, donors, partners, and advocates for the those projects and possibly the larger mission of the Forest Service. Managing the trail based on desired experience, sustainable construction and maintenance, and suitability for the desired conditions of the area rather than simply by mode of travel would allow the Forest Service to actually manage a trail system rather than a spider web of legacy routes and cut off the root cause of illegal trail construction which, would help achieve Desired Condition 17.

Response:

The Forest Plan contains direction that addresses this comment. A guideline in the Trails and Trailheads section requires trails and trailheads to be designed, built, rerouted, or maintained utilizing current best practices that promote sustainable trail surfaces, prevent conflicts with neighboring lands, address impacts to other resources, and consider user experiences. See FW-Rec-Trails-G-1. Furthermore, a guideline in the All Recreation sections requires recreational activities, locations, and/or settings to be designed and managed to maintain or move towards desired conditions for other uses and resources. See FW-Rec-All-G-1.

Commenter: Kell, Patrick

Comment:

Mitigation of Harvest Impacts IMBA would also like to recommend that a buffer is maintained between harvested areas and existing trails, again to minimize the visual impacts from logging operations. A general recommendation is that existing single-track trails or their corridors are not used as logging extraction routes, even if rehabilitation is prescribed. The end result even after rehabilitation is often that the trails are significantly negatively impacted. We also suggest that the marking of trees for harvesting is done in such a way as to minimize the visual impacts from the trail.

Response:

The Plan was not modified to include a specific buffer between harvested areas and existing recreational trails. The concern regarding impacts to recreational activities from the harvest of forest products is addressed in other ways by plan components. FW-FProd-DC-2 and FW-FProd-G-2 ensure that timber cutting techniques consider recreational opportunities and recreation desired conditions. Guidelines for scenic resources also address the concerns that can be associated with timber harvest. See FW-Scenic -G-3 and 4. Overdevelopment of single-track trails is addressed by a desired condition for Trails. See FW-Rec-Trails-DC-3.

Commenter: Kell, Patrick

Comment:

The lone objective for dispersed recreation is to "Develop 2 to 8 systems of designated bike trails, equestrian trails, and/or motorized trails to adequately provide for these defined user groups and to reduce conflicts between those shared user groups within 10 -years of plan approval." We fully support this objective. To accomplish this we strongly recommend that the Forest engage in a comprehensive non-motorized trails plan that is not simply an assignment of permitted uses but rather gives full consideration to what the experience of a given trail is and why users choose it. Significant quantities of the Forest Service trails currently in use were not designed or constructed to be sustainable recreation trails. They were developed as temporary extraction roads, firebreaks, hunting routes, or game trails and have been repurposed as long term public access routes. As these routes often were not planned to act as trails they often fail to showcase the landscape or effectively manage visitor access and experiences as well as to be sustainable. A purposefully designed trail system provides low-impact levels on the land, showcases the land, steers visitors away from sensitive areas, and provides a myriad of experiences.

Response:

Conducting a comprehensive non-motorized trail planning effort that evaluates the propriety and effectiveness of existing trails and identifies new trail routes is outside of the scope of the Forest Plan. The Forest Plan contains plan components that would guide such an effort. For example, the Trails section contains a desired condition for a system of well-marked and well-maintained trails that are planned and designed to be harmonious with neighboring lands and trail systems through logical connections which expand recreational opportunities. See FW-Rec-Trails-DC-1. A management approach in the Trails section reminds forest managers to: Collaborate with county and city trails coordinators, local groups, and area residents, when conducting trail planning. Consider needs for nonmotorized and motorized trails and provide opportunities for both.

Commenter: Kell, Patrick

Comment:

Thank you for including a section dedicated to dispersed recreation that specifically include mountain bicycling. Forest planning often focuses on the various zones or management areas within the forest without addressing the uses that regularly cross multiple management boundaries. We especially appreciate the recognition of mountain bicycling as a valid use of multi-use trail in Desired Condition 16.

Response:

Thank you for your comment. Upon review, it was determined that this desired condition contained several disparate topics. During the editing process to address this problem, the express reference to mountain bicycling was removed from the desired condition because the intent was to discuss trails providing diverse settings and opportunities for a variety of skill levels, not highlight one particular use of multi-use trails. The portions of the desired conditions relevant to this discussion can now be found in FW-Rec-Trails-DC-1 and 2. To keep from losing the reference to mountain biking, it is now highlighted in the General Description and Background in several sections of the plan. See the General Description and Background in the Dispersed Recreation and Trails and Trailheads subsections of the forestwide Recreation section as well as many of the management areas discussed in Chapter 3 of the Forest Plan.

Commenter: Kell, Patrick

Comment:

IMBA would recommend that these new trails are planned with specific input from each user group and include professional design and construction advice, for example from a Trail Specialist a member of the IMBA Trail Solutions Program.

Response:

Potential changes to the Coconino NF's trail systems would be evaluated in separate analysis through future project-level decisionmaking. These decisions would be consistent with the National Environmental Policy Act (NEPA), the Forest Service Handbook and Forest Service Manual and would include analysis and opportunity for public involvement. Site-specific trail planning will use the framework set by the plan (such as desired conditions, standards, guidelines, and suitability determinations) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from trail design or uses, they could be addressed through site-specific evaluation and analysis. The Forest Plan contains several components that would promote collaboration with interested user groups. A guideline in the Trails section directs trails to be designed and built with user experiences in mind. See FW-Rec-Trails-G-1. A Trails management approach reminds forest managers to collaborate with user groups, among others, when conducting trail planning. It states: Collaborate with county and city trails coordinators, local groups, and area residents, when conducting trail planning. Consider needs for nonmotorized and motorized trails and provide opportunities for both. Law, regulation, and policy related to trails and trailheads is located in Appendix D in the plan.

Comment:

Restoration is an appropriate management objective for the Coconino National Forest, and we recommend application of the Society for Ecological Restoration's definition of "restoration" as "the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed" (SER 2004: 3). The word "assisting" is central to the meaning of this definition. Historical fire exclusion, livestock grazing and logging have altered ecological conditions such that existing systems are vulnerable to catastrophic loss and require active management to reduce fuels and restore adapted ecological processes including fire (USDA 2009). However, this idea is controversial in many PNVT because there is evidence that stand-replacing fires are part of the historic range of variability for mixed conifer PNVT in the planning area (eg, Odion et al. 2014). In many cases, passive restoration including cessation of activities that degrade ecosystems (e.g., fire exclusion and livestock grazing) may be sufficient to accomplish restoration, particularly in roadless areas where historical management has had little, if any, direct impact to forest ecosystems (DellaSala et al. 2004). The EIS should establish criteria for active and passive restoration of forest vegetation accounting for the "future range of variability" (Johnson and Duncan 2007) of sustainable ecological conditions that account for the foreseeable impacts of climate change (Choi et al. 2008, Millar et al. 2007).[...] Large areas of the Coconino National Forest remain little disturbed by human management and closely resemble conditions in which indigenous life evolved (DellaSala et al. 2004). Places retaining high degrees of ecological integrity generally host few if any roads. Those places function as reservoirs of biodiversity where passive restoration (i.e., halting or foregoing activities that may cause ecological damage) and active use of wildland fire for resource benefits may offer the most ecologically sensible management approaches over time (DellaSala et al. 2004). However, legitimate needs for more active restoration often exist in areas with high road densities, particularly at lower elevations where intensive human use history overlaps drier forest types that are most likely to have experienced functional alteration due to cumulative effects of fire exclusion, livestock grazing and logging (DellaSala et al. 2004).

Response:

The Forest Plan provides a comprehensive framework to guide future decisions on projects and activities on the Forest. The Forest Plan includes desired conditions for functioning and resilient resources based on a range of historic conditions. The Forest Plan includes other components that ensure that projects and activities are designed in a manner that maintains or moves the Forest toward these desired conditions and prevents ecological harm. In response to this comment, a definition for the term "restoration" has been added to the Glossary. It states that restoration is: The process of assisting in the recovery of an ecosystem that has been degraded, damaged, or destroyed (Society for Ecological Restoration International, 2004). Ecological restoration focuses on establishing or re-establishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions. The decision to restore an area and what techniques might be appropriate (e.g. active or passive restoration) would be made at the project level based on site specific conditions, not at the forest plan level. Site specific conditions would include current and desired vegetation conditions, fire or disturbance history, threats, and other resource values. The decision on whether wildland fire is the appropriate tool for use at a particular time and place is decided at the time of natural ignition. Wildland fire may be a tool in areas where mechanical treatments are not appropriate, such as in wilderness. Considerations in deciding whether wildland fire is an appropriate tool could include, but are not limited to, fuel loading, proximity of wildland urban interface, threats to life and property, fire regime, capacity to manage the fire, and weather. The Forest Plan provides desired conditions that will guide future management. A desired condition in the Fire section acknowledges the desire for wildland fires to burn within the historic fire regime of the vegetation communities affected. See FW-Fire-DC-2. If wildland fire is used as a restoration tool under the Forest Plan, it will need to meet or move towards the desired conditions in the Forest Plan. Wildland fire may not always be the appropriate tool to achieve restoration in every situation. In areas where fire has been removed from the landscape over a long period of time, introducing fire without some level of mechanical treatment could result in uncharacteristic fire behavior, which would not meet the desired conditions of other resources or programs on the Forest. See FW-Eco-DC-3 and FW-TerrERU-DC-DC-3.

Commenter: Lininger, Jay

Comment:

In addition, the Forest Service should consider and analyze an action alternative in the EIS that features standards prohibiting new road construction, requiring no net-increase of road density in key watersheds, and an objective encouraging reduction of road density in each fifth-field watershed to less than two miles per square mile. In addition, it should prioritize management approaches that remove roads affecting aquatic ecosystem functions.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Draft

Comment:

Road location, design, construction and engineering practices have improved over time, but few studies systematically and quantitatively evaluate whether newer practices result in lower erosion rates (Gucinski et al. 2001). Even with improved practices and mitigation, total accelerated erosion and sediment yields are still at least 50 percent or more than natural yields over time (Gucinski et al. 2001). This is a best-case scenario. Roads contribute more sediment to streams than any other land management activity (Gibbons and Salo 1973, Meehan 1991). Substantial increases in sedimentation are unavoidable even when the most cautious road construction methods are used (Gucinski et al. 2001, McCashion and Rice 1983). Roaded and logged watersheds in the same basin also feature significantly higher channel bed substrate embeddedness than do undeveloped watersheds (Gucinski et al. 2001). Road-stream crossings in particular cause significant downstream sedimentation, largely resulting from channel fill around culverts and subsequent road crossing failures (Furniss et al. 1991, Trombulak and Frissell 2000). Road-stream crossings create unnatural channel width, slope and streambed form both upstream and downstream from the crossings, and these alterations of channel morphology can persist for long periods (Heede 1980). Channelized stream sections resulting from rip-rapping roads adjacent to stream channels are directly affected by sediment from side casting and road grading, and such activities can trigger fill slope erosion and failures (Gucinski et al. 2001). Endicott (2008: 2) observed that road construction and maintenance at stream crossings "may involve point source discharges of dredged or fill material which may require a [Clean Water Act] section 404 ... permit." More: Unpaved roads and stream crossings are the major source of erosion from forest lands (Anderson et al., 1976, Megahan and Kidd, 1972; Patric, 1976; Rothwell, 1983), contributing up to 90% of the total sediment production from forestry operations. Surface erosion rates from roads are typically at least an order of magnitude greater than rates from harvested areas, and as much as three orders of magnitude (1,000 times) greater than erosion rates from undisturbed forest soils (NCASI, 2001) [sic]. Endicott (2008: 9). The distance that sediment travels is an important factor in determining how much eroded soil is delivered to a water body. Soil losses and erosion occurring closer to a stream have greater potential to deliver sediment and lead to water quality impairment than erosion farther away from streams. For this reason, road-stream crossings have high potential to adversely impact water quality (Endicott 2008). The Forest Service must account for these factors and disclose potentially significant impacts that may result from the existing road network.[...] Despite the lack of studies looking at effects of post-fire road use, it is likely that roads will contribute most to sediment production in the post-fire environment, just as they do in unburned forest (Beschta et al. 2004, McIver and Starr 2000, Karr et al. 2004). Roads contribute more sediment to streams than any other anthropogenic feature on the landscape (Gibbons and Salo 1973, Meehan 1991). Beschta (1978) reports that mid-slope roads on steep terrain are the primary contributors to increased sediment production during logging operations. Swank and others (1989) estimated that while erosion after logging was seven times greater than in undisturbed areas, erosion rates on landings and roads were 100 times those of undisturbed areas.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Lininger, Jay

Comment:

Without including monitoring requirements for water flows and supply, there is no way for the Forest Service to meet NFMA requirements to provide quantitative estimates for water quantity to track progress on the water quantity goals and guidelines contained in the forest plan. To remedy this problem, we recommend incorporating a monitoring question that asks "What are the status and trends for water supply and streamflow within the Coconino National Forest?" This monitoring should take place forest-wide and use the same methods used to track streamflow measurement data for instream water rights applications. This monitoring, which we would suggest completing annually on a seasonal basis, will allow the Forest Service to identify the success or failure of meeting the desired conditions and guidelines for water quantity contained in the Draft Plan. Additionally, such monitoring will give the public a better understanding of water supply trends in the Coconino leading to better management decisions and public awareness about water resources.

Response:

Two items have been added to the Monitoring Plan in response to these comments. One would track the number of water rights procured or water right filings made, and the other would track peak flows and annual flows for three major streams: Oak Creek, Beaver Creek, and Fossil Creek.

Draft

Commenter: Lininger, Jay

Comment:

However, the management approaches and guidelines presented in the Draft Plan are not sufficiently clear to allow for assessment of how the Forest Service will structure its activities to obtain these rights or for which streams they will seek instream flow rights. The Forest Service can obtain instream water rights from the Arizona Department of Water Resources only through a lengthy process that requires submission of five years of streamflow measurement data after the initial application is accepted. ARS § 45-152.01 (2014). According to the DEIS, the Forest Service already has submitted an application and is tracking streamflow measurements for four streams. DEIS at 57. Additionally, six streams in the Coconino already have certified water rights held by the Forest Service for instream flows. Id. This is excellent progress, but more substantive guidance on tracking streamflow and identifying streams requiring instream flow rights is needed in the Final Plan. Moreover, the Forest Service has acknowledged that a detailed analysis of water supply on the Coconino has not been done. Id. at 58.

Response:

The language relating to maintenance and procurement of instream water rights has been adjusted in the in the Water section in response to your suggestion. Maintenance of existing water rights is addressed in FW-Water-DC-6, which states: Water quality, water quantity and the timing of water flows support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities. Water quality, water quantity, and the timing of flows are sustained at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. Procurement of instream water rights is address in FW-Water-G-3, which states: Instream flow water rights should be procured for those streams without instream water rights to ensure that sufficient flow is provided for aquatic species, habitat, and recreation. In addition to FW-Water-G-3, there are multiple management approaches in the Water section which identify priorities and expectations for the Water program in the future. These management approaches remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest.

Commenter: Lininger, Jay

Comment:

Finally, in the DEIS section addressing Aquatic Systems, there is a paragraph concerning wilderness and wildfire that seems to be misplaced. DEIS at 56, paragraph 3. We would ask that this passage is either removed or is edited to provide additional clarification as to why it is relevant to the discussion of water quality.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Lininger, Jay

Comment:

Ecologists stress the importance of defining locally specific reference conditions to justify restoration goals and outcomes (SER 2004). Descriptions of natural variation in ecosystems derived from historical ecology and their application as reference conditions to land management are matters of controversy (e.g., Allen et al. 2002, Swetnam et al. 1999, Williams and Baker 2012). However, it is generally accepted that understanding historical ecosystem dynamics, structures and functions can provide useful information to guide restoration efforts (SER 2004).

Response:

The Forest Plan includes desired conditions that account for locally specific conditions. To make this point more clear, the tables that include desired proportions of seral stages were moved to Appendix F because including this information in Chapter 2 of the Forest Plan was causing confusion over how the information in the tables should be used. The seral stage proportions for modeled states included in these tables is for assessment at the scale of the entire ERU within a Forest boundary or greater. Seral stage proportions are rarely, if ever, applied at the project level. For instance, the application of seral stage values for spruce-fir forests that typically have long stand replacement intervals and large patch dynamics, may only be appropriate at subregional scales. To emphasize that the seral stage values in these tables were not intended, in most cases, to be applied at the project level, this information was moved to Appendix F and an introduction was developed to explain the intended purpose of these tables. Reference conditions (based on the historic range of variation) were considered when determining the desired conditions. Reference conditions are considered a "best" estimate of a resilient and functioning ecosystem because they reflect the evolutionary and historical ecology of forests. Because the desired conditions in the Forest Plan generally describe this range of variation, there is room for locally specific desired conditions to be identified. For example, a desired condition in the Ponderosa Pine ERU section allows for openings that typically range from 10 percent in more productive sites to 70 percent in the less productive sites. See FW-TerrERU-PP-DC-4. When restoration activities are undertaken, the locally specific desired conditions that are within the historic range of variation described in the Forest Plan would be developed at the project level.

Commenter: Lininger, Jay

Comment:

The Forest Service also fails to mention or discuss the use of reclaimed water within forest boundaries. While specific projects utilizing reclaimed water, as well as their approval, are outside the scope of the Draft Plan and DEIS, their potential impact on water quality within the forest is significant enough to merit discussion within the cumulative effects analysis and also to merit specific standards and guidelines pertaining to reclaimed water use. Given the ongoing drought and significant demand for water within the forest, it is advisable and necessary for the Forest Service to address this and other potential outside water sources in a meaningful way within the Final Plan.

Response:

The Forest Plan does not authorize the use of reclaimed water for snowmaking or any other particular use. The Forest Plan establishes plan components that will guide decisions on projects and activities that are made after it is in effect. For example, the revised Forest Plan includes desired conditions for watersheds to be functioning properly and to exhibit high geomorphic, hydrologic, and biotic integrity within their inherent capability. See FW-Water-DC-1 and 2. A desired condition for the Alpine Tundra ERU seeks to maintain the attributes and processes that contribute to the ecological diversity and habitat for native biota in the ERU. See FW-TerrERU-AT-DC-1. New decisions on the use of reclaimed water for snowmaking will need to be consistent with these desired conditions and all of the other guidance in the Forest Plan. Past decisions are outside the scope of the plan. The effects of existing authorizations for snowmaking and use of reclaimed water on alpine tundra and the species and cultural values associated with alpine tundra were analyzed in the decision to authorize use of reclaimed water and snowmaking.

Commenter: Lininger, Jay

Comment:

We would also like to see language in the Final Plan that suggests a strategy of working with private landowners to educate them about the dangers to human health, water quality, and fish and wildlife habitat posed by old and leaking septic tank systems. This is an easy to implement management strategy that would begin to address another major contributor to E. coli pollution problems that is also within the ability and scope of the Forest Service's management role in the Coconino National Forest.

Response:

Arizona Department of Water Resources is responsible for monitoring water quality. Local county health departments are responsible for advisories restricting designated uses such as swimming. Two Management Approaches were added to the Watersheds and Water section, which state: Collaborate with volunteers, other agencies, private landowners, and other stakeholders on education, interpretation, and monitoring relating to water quality, public health, and fish and wildlife habitat especially in regards to threats to water quality from leaking septic tank systems; threats to water supply and water quality from wildfires; threats to downstream resources from the use of fertilizers; and threats to health and resources from improper disposal of diapers and other garbage or when state water quality standards have been exceeded. Provide input and recommend strategies for implementation plans as required by Arizona Revised Statute 49-234 for existing TMDLs to provide strategies to reduce existing pollutant loads identified in TMDLs and to be in compliance with applicable water quality standards for impaired waters. Restricting access and human use is an action that could be taken if water quality is not in desired condition. A decision to implement these type of restrictions would be based on site-specific information and analysis. The forest plan has several plan components relating to water quality including meeting, or exceeding Arizona water quality standards, improving water quality, and implementing approved total maximum daily load recommendations for impaired or non-attaining waters. See FW-Water-DC-7, FW-Water-G-5, FW-Rip-All-DC-3 and 4. A guideline in the Oak Creek Management Area would require recreation management to maintain water quality. See MA-OakCrk-G-9. Finally, an item in the Monitoring Plan would track forest changes to Arizona Department of Environmental Quality impaired or non-attaining list.

Commenter: Lininger, Jay

Comment:

One of the primary water quality problems identified in the Coconino is the presence of E. coli within Oak Creek and the Upper Verde River watershed. According to the DEIS, this accounts for 33 miles (15 percent) of streams that are classified as Class 5 (impaired). DEIS at 5. However, the Draft Plan provides no desired conditions, objectives, standards, or guidelines that address or attempt to respond to this problem. The primary cause of this activity is septic system leaks and recreational swimming. This human caused pollution should therefore be a relatively easy target for the Forest Service to try to minimize and prevent. To address this issue, we recommend incorporating the following standards or guidelines for water quality into the Final Plan: * Monitor water quality during periods of high recreational use to determine if State water quality standards for primary contact recreation are being violated. * Restrict access and human use in areas where water quality is failing to meet State water quality standards until such time as water quality has been restored.

Response:

Arizona Department of Water Resources is responsible for monitoring water quality. Local county health departments are responsible for advisories restricting designated uses such as swimming. Two Management Approaches were added to the Watersheds and Water section, which state: Collaborate with volunteers, other agencies, private landowners, and other stakeholders on education, interpretation, and monitoring relating to water quality, public health, and fish and wildlife habitat especially in regards to threats to water quality from leaking septic tank systems; threats to water supply and water quality from wildfires; threats to downstream resources from the use of fertilizers; and threats to health and resources from improper disposal of diapers and other garbage or when state water quality standards have been exceeded. Provide input and recommend strategies for implementation plans as required by Arizona Revised Statute 49-234 for existing TMDLs to provide strategies to reduce existing pollutant loads identified in TMDLs and to be in compliance with applicable water quality standards for impaired waters. Restricting access and human use is an action that could be taken if water quality is not in desired condition. A decision to implement these type of restrictions would be based on site-specific information and analysis. The forest plan has several plan components relating to water quality including meeting, or exceeding Arizona water quality standards, improving water quality, and implementing approved total maximum daily load recommendations for impaired or non-attaining waters. See FW-Water-DC-7, FW-Water-G-5, FW-Rip-All-DC-3 and 4. A guideline in the Oak Creek Management Area would require recreation management to maintain water quality. See MA-OakCrk-G-9. Finally, an item in the Monitoring Plan would track forest changes to Arizona Department of Environmental Quality impaired or non-attaining list.

Commenter: Lininger, Jay

Comment:

In the third stated guideline for Water Quality within the Draft Plan, the Forest Service states that "[b]est management practices for ground disturbing activities in and outside of streamside management zones should be identified, implemented, and monitored to maintain water quality" Draft Plan at 20, emphasis added. "Ground disturbing activities" as defined in the Draft Plan, to which that phrase in the previous sentence is linked, covers only "[a]n activity which moves soil to the extent where an archeological site may be impacted." Id. at 196. This definition is too narrow to fully encompass the numerous activities that may disturb soil. The Forest Service needs to provide a broader definition for these activities. We recommend incorporating the following definition for "ground disturbing activities" into the plan: "an activity that has the potential to cause disruption to soil placement or quantity."

Response:

The guideline has been adjusted to address your concern that, as defined, the term "ground disturbing activities" is too narrow and would not protect water quality. The guideline has been rewritten to incorporate your suggestions. See FW-Water-G-4. In addition, the term "ground disturbing" has been removed from the glossary. The definition was too narrowly focused on impacts to archaeological sites and did not fully encompass other actions that could impair water quality or impact other resources.

Commenter: Lininger, Jay

Comment:

The Draft Plan establishes a guideline for water quality management that states "[TMDL] recommendations or implementation plans should be considered and implemented as appropriate [as determined by a forest interdisciplinary team]." Draft Plan at 20. It is unclear from the discussion provided in the Draft Plan and DEIS what circumstances would preclude the application of TMDL recommendations or implementation plans from being used for water quality management in Forest. The Center recommends clarifying this direction and identifying reasons why the forest team would decide not to implement TMDL guidance.

Response:

A guideline in the Watersheds and Water section has been adjusted to address these comments. The word "considered" has been replaced with "implemented." See FW-Water-G-5. The Forest Plan establishes a framework and strategy for management activities but generally does not prescribe specific approaches, such as how to implement a TMDL. Implementation would be worked out at the project level. There are several management approaches related to TMDLs to provide input and recommend strategies for, and to implement existing TMDLs in Watersheds and Water, and Stream Ecosystems. These management approaches remind forest managers to: Provide input and recommend strategies for implementation plans as required by Arizona Revised Statute 49-234 for existing TMDLs to provide strategies to reduce existing pollutant loads identified in TMDLs and to be in compliance with applicable water quality standards for impaired waters. Coordinate with the Arizona Department of Environmental Quality to monitor and achieve acceptable total maximum daily loads (TMDLs) suspended sediment concentration in the Verde River.

Commenter: Lininger, Jay

Comment:

Due to the projected decreased in the number of livestock in counties surrounding the Coconino, USDA 2009 at 14, and the fact that riparian areas account for only one percent of forest lands, it is reasonable for the Forest Service to consider and implement additional management strategies for livestock grazing within the Forest Plan that would decrease the negative effects of this permitted activity on water resources.

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Commenter: Lininger, Jay

Comment:

Additionally, the current monitoring plan proposed for the Coconino is not sufficient to accurately track and monitor the impacts of grazing on riparian and aquatic ecosystems. Therefore, we recommend the Forest Service incorporate a modified version of the monitoring guidelines for livestock grazing included in the Current Forest Plan, New Page 66-1, into either the forest-wide monitoring strategy. These guidelines should require identification of key forage monitoring areas both inside and outside of riparian areas and wetlands, identification of key monitoring species to assess grazing impacts on riparian and aquatic ecosystems, and a timeline for analysis of impacts both during and after permitted grazing periods.

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Comment:

Additionally, the Forest Service does not even mention livestock grazing in its discussion of water quality within the DEIS. See DEIS at 54-56. The only management directive related to grazing that is stated as having a beneficial impact is the previous removal of lands along parts of Verde River from grazing permitting that "resulted in improved riparian conditions along the river during the last 10 years." DEIS at 77. It is not clear why additional limitations and restrictions on grazing near rivers and in riparian areas were not considered within the DEIS. This is a significantly different consideration than the dismissed alternative that called for no grazing within the Coconino, and should be adequately evaluated or discussed as a reasonable management strategy.[...] The Center is especially concerned with the continued authorization of grazing within sensitive riparian areas, such as those near Fossil Creek and the Verde River. As detailed in the Environmental Assessment completed for the renewal of the Fossil Creek Allotment Grazing Permit, the majority of acres that have been used for livestock grazing within this area contain soils that are either "impaired," "unsatisfactory," or "inherently unstable." (USDA May 2013: 55, tbl8). These types of soil conditions contribute to increased sedimentation of streams, turbidity, and overall decreased ecological function of riparian and aquatic ecosystems. The Forest Service states that "[t]he rate of improvement of soil conditions [within grazing allotments] would depend heavily on climate conditions." (USDA May 2013: 64) It is unlikely that rangelands will return to historical reference conditions that supported grazing activity in the past due to the effect of climate change in the Southwest. (Seager and Vecchi 2010: 21282). Moreover, the Forest Service previously acknowledged a general decline in range condition between 1998 and 2006 on the Fossil Creek Allotment. (USDA May 2013: 9). This decline was attributed to "drought coupled with livestock grazing." Id. Going forward, it is likely that drought will be a common occurrence on the Coconino and that livestock grazing will have a more detrimental impact to the vegetation and soil structure on grazing allotments. The Forest Service notes that due to water rights held for livestock grazing, it is "not feasible to preclude this activity from all wetlands." DEIS at 281. However, allowing for a case-by-case exemption due to state issued water rights, the Forest Service can restrict livestock grazing to areas outside of wetlands and riparian areas. We recommend incorporating the following standard creating buffer zones into the Plan sections addressing Livestock Grazing, Draft Plan at 79-80: * Livestock grazing shall not be permitted within a quarter of a mile from riparian areas, wetlands, or seasonally present water, except as necessary to allow for continued use of state-issued water rights as allowed under Arizona State law. The benefits of riparian buffers in grazing management are numerous and include: "stabilization of streambanks, the filtering of runoff, the reduction of peak floods, and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife." (Agouridis et al. 2005: 598).

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Comment:

According to the Forest Service, an additional "need for change" is to develop plan components to focus on restoration of fire-adapted ecosystems, including utilization of a wide variety of methods, including silvicultural treatments (USDA 2009). It is imperative that post-fire "salvage" logging after fire must not be equated with ecological restoration or forest management objectives other than economically-motivated multiple use. Noss and others (2006b: 485-86) caution that post-fire logging is counter to resilience of fire-adapted forest ecosystems for six reasons: Our key findings on post-fire management are as follows. First, post-burn landscapes have substantial capacity for natural recovery. Re-establishment of forest following stand-replacement fire occurs at widely varying rates; this allows ecologically critical, early-successional habitat to persist for various periods of time. Second, post-fire (salvage) logging does not contribute to ecological recovery; rather, it negatively affects recovery processes, with the intensity of impacts depending upon the nature of the logging activity (Lindenmayer et al. 2004). Post-fire logging in naturally disturbed forest landscapes generally has no direct ecological benefits and many potential negative impacts (Beschta et al. 2004; Donato et al. 2006; Lindenmayer and Noss 2006). Trees that survive fire for even a short time are critical as seed sources and as habitat that sustains biodiversity both above- and belowground. Dead wood, including large snags and logs, rivals live trees in ecological importance. Removal of structural legacies, both living and dead, is inconsistent with scientific understanding of natural disturbance regimes and short- and long-term regeneration processes. Third, in forests subjected to severe fire and post-fire logging, streams and other aquatic ecosystems will take longer to return to historical conditions or may switch to a different (and often less desirable) state altogether (Karr et al. 2004). Following a severe fire, the biggest impacts on aquatic ecosystems are often excessive sedimentation, caused by runoff from roads, which may continue for years. Fourth, post-fire seeding of non-native plants is often ineffective at reducing soil erosion and generally damages natural ecological values, for example by reducing tree regeneration and the recovery of native plant cover and biodiversity (Beyers 2004). Non-native plants typically compete with native species, reducing both native plant diversity and cover (Keeley et al. 2006). Fifth, the ecological importance of biological legacies and of uncommon, structurally complex early-successional stands argues against actions to achieve rapid and complete reforestation. Re-establishing fully stocked stands on sites characterized by low severity fire may actually increase the severity of fire because of fuel loadings outside the historical range of variability. Finally, species dependent on habitat conditions created by high severity fire, with abundant standing dead trees, require substantial areas to be protected from post-fire logging (Hutto 1995). The objective of post-fire logging is to remove commercially valuable trees not consumed by fire (Beschta et al. 2004). It results in long-term impairment of forest recovery and fire resilience by removing trees and snags that are, by definition, resilient to severe fire effects (Arno 2000, Lindenmeyer et al. 2008). The unconsumed boles of large-diameter trees feature high surface area-to-volume ratios that limit the amount of oxygen feeding combustion, canopy biomass located high above the ground surface that resists ignition, and high water content that dampens fire intensity. Large standing snags and trees and large downed logs obstruct solar radiation and ground-level wind movement, and their microclimatic influences tend to moderate ground temperatures, increase moisture of live and dead fuels, reduce the speed and variability of surface winds, and inhibit extreme fire behavior compared to sites cleared by logging (McIver and Starr 2000). Predominance of large trees, snags and logs at stand scales reduces fire effects compared to their absence (Arno 2000). The Forest Service should apply the full body of available science to describe possible trajectories of plant community succession after fire under the management objectives described for each alternative. Soil disturbance and movement of vehicles, equipment and personnel on burned sites increases the likelihood of weed invasion, with potentially significant impacts to ecosystem function and disturbance regime (Brooks et al. 2004, Lindenmayer et al. 2008). Untreated logging slash may inhibit plant growth, and logging operations may virtually eliminate nitrogen-fixing shrub and forb species (Donato et al. 2006). Inhibited regeneration of early-successional species may lead to localized extinctions of other species that restore site productivity after fire. Furthermore, inhibited plant regeneration would preclude burned slope stabilization and result in greater loss of topsoil and increased sedimentation in aquatic habitats than would occur in the absence of post-fire logging (Beschta et al. 2004). Loss of site productivity is a costly impact of post-fire logging because of its deleterious effect on nitrogen and carbon cycling and on future forest growth (Lindenmayer et al. 2008). Loss of soil productivity caused by loss of topsoil and inhibited early-successional plant regeneration is a long-term and irretrievable adverse impact to the forest ecosystem (Beschta et al. 2004). Recovery would not occur for decades because it would take that long for the ecosystem to replenish organic matter removed by post-fire logging that otherwise would decompose in situ. The

effect of organic matter loss on site productivity is not well understood for lack of research (McIver and Starr 2000). The Forest Service should study this matter of scientific uncertainty and disclose its significance relative to the environmental impact of the plan revision.

Response:

Whether post fire salvage logging is characterized as ecological restoration will be determined at the project level. The Forest Plan provides desired conditions that will guide future management. If post fire salvage logging is pursued under the Forest Plan, it will need to meet or move towards the desired conditions in the Forest Plan. A management approach in All Ecosystems section remind forest managers: Following large or uncharacteristic disturbance events, focus management actions on human health and safety, long term restoration, soil and watershed stabilization, restoration or protection of ecosystem processes and resource values. Whether the proposed logging meets or moves the project area towards the desired conditions in the Forest Plan will be determined at the project level based on site-specific analysis.

Commenter: Lininger, Jay

Comment:

We also recommend incorporating the following standards and guidelines from the Current Plan, see replacement page 159, as modified, into the standards and guidelines for forest-wide dispersed recreation management within the Draft Plan. Draft Plan at 106-108 (FW-Rec-Disp-S, FW-Rec-Disp-G):
* Closely monitor off-road driving. If damage is occurring or becomes imminent, close affected trails or areas to off-road vehicle use. * Focus media attention on off-road driving damage in these sensitive areas at least annually.

Response:

The suggested language from the 1987 Forest Plan is no longer necessary because off road driving is now generally only allowed in the Cinder Hills OHV area. The suggested language addressed concerns that existed prior to implementation of the Travel Management Rule when cross country travel by motorized vehicles was allowed. Nonetheless, the Plan is not silent on off-road driving. A standard in the Roads and Facilities and Dispersed Recreation sections prohibit motor vehicle use beyond the designated system of roads, trails and areas, with limited exceptions. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1. Other plan components also address motorized recreation. See FW-Rec-DC-2, FW-Rec-G-1, and FW-Rec-Disp-Management Approaches, which state: Establish long-term partnerships with recreation organizations to help plan, construct, and maintain motorized and non-motorized recreation opportunities and foster a low impact conservation ethic. Develop management plans and/or strategies through collaborative efforts for specific dispersed recreation activities and/or locations to addresses user needs, visitor safety, and resource protection. Activities or locations could include motorized recreation for Cinder Hills OHV Area, rock climbing at the Oak Creek Vista, and mountain biking around Sedona. Coordinate with city, county, state, and other agencies to manage motorized recreation and reduce cross-boundary conflicts. The Plan contains many components that are designed to educate users of the forest about the resources on the Forest and the ethical use of those resources. These components have been combined into the Interpretation and Education section. These plan components provide direction to inform forest users about sustainable uses and practices on the Forest.

Comment:

Explicitly require implementation of species recovery plans (i.e., site-specific activities "shall" implement recovery plans for federally-listed endangered and threatened species).

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: Lininger, Jay

Comment:

In order to combat the negative effects of off-road vehicle use on water quality, the Forest Service should close and decommission any ORV trails that cross streams or are near riparian areas where damage to riparian or aquatic ecosystems is occurring or where off-trail use into streambeds, streambanks, or running water is occurring.

Response:

The Forest is not making site-specific decisions, such as the closure or decommissioning of specific trails, in the Forest Plan. Appropriate routes for ORV use have been and continue to be addressed through the Travel Management Rule (TMR) process, which makes decisions on road and trail use based on site specific information. Since the implementation of the TMR on the Forest, cross country motorized travel has been generally prohibited. The Forest Plan contains direction that will guide future decisions related to the concern expressed in this comment. A comprehensive set of desired conditions and other plan components are included in the Riparian Areas section of the Forest Plan. See the FW-Rip-All, FW-Rip-Strm, FW-Rip-WtInds, FW-Rip-Spr, and FW-Rip-RipType sections in Chapter 2 of the Forest Plan. Plan components in the Recreation section require consideration of the desired conditions for other resources, including riparian and aquatic ecosystems, and provide other guidance designed to protect resources from potential impacts from motorized recreation. See FW-Rec-All-DC-6, FW-Rec-All-G-1 and 2, FW-Rec-Disp-DC-2 and 3, FW-Rec-Disp-S-1, and FW-Rec-Disp-G-1.

Commenter: Lininger, Jay

Comment:

The Forest Service has repeatedly identified livestock grazing as a source of water quality degradation and a stressor for aquatic ecosystems. However, the Forest Service provides no data or analysis within the DEIS to suggest that the proposed standards and guidelines for livestock grazing will result in an improvement in riparian or aquatic ecosystem function within the Coconino.

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Commenter: Lininger, Jay

Comment:

Require analysis of management effects to both water quality and quantity before approval or adoption of any site-specific action (i.e., analysis of site-specific activities "shall" consider direct, indirect and cumulative effects to water quality and quantity).

Response:

No change to the Forest Plan has been made in response to this comment. It is not necessary to include a general requirement in the Forest Plan to consider management effects to water quality and water quantity in every site-specific action. Resources that are potentially affected by a site-specific proposal are identified through internal and public scoping. If it is determined that water quality and/or water quantity may be impacted by the proposal, then they will be addressed in the environmental analysis that is prepared in compliance with the National Environmental Policy Act.

Commenter: Lininger, Jay

Comment:

The following is listed as a guideline for Roads and Facilities in the Draft Plan: "Stream crossings on permanent roads should be designed to provide the most cost efficient drainage structure consistent with resource protection, including safe passage of native aquatic organisms, and consider infrastructure needs and legal obligations." Draft Plan at 93. This guideline is not sufficient to tackle the ongoing problem of sediment pollution from roads. The guideline should be changed to read: "Stream crossing on permanent road shall be designed to provide the most effective drainage structure designed to ensure resource protection, safe passage of native aquatic organisms, and prevention of pollution and sedimentation of streams."

Response:

This guideline has been adjusted to address in response to your suggestions. Resource protection associated with stream crossings is now strategically addressed in FW-RdsFac-DC-1, FW-RdsFac-G-1, 2, 5, and 9. Whether a drainage structure is "cost efficient" is a site-specific determination.

Commenter: Lininger, Jay

Comment:

The Cumulative Effects section of the DEIS related to "Water and Riparian Resources" is completely inadequate and does not meet NEPA standards. DEIS at 85; 40 C.F.R. §§ 1508.7, 1508.8 1508.25 (2013). As it is currently written, this section only identifies which threats to water and riparian resources the Forest Service does and does not have control over. It does not describe how the various threats and activities that take place on and off the forest cumulatively impact water and riparian resources. An example of the insufficiency of this section is the way in which it addresses drought, an extremely significant threat to water and riparian resources with serious effects: "Drought is another influence that is outside of forest control." DEIS at 85. The Forest Service must supplement this cumulative effects analysis and include discussion of how drought and climate change, along with other human and livestock activities, will likely cumulatively affect water quality and riparian resources over the life of the forest plan based on proposed management strategies.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Lininger, Jay

Comment:

The NFMA directs the Secretary of Agriculture to issue regulations "that set out the process for the development and revision of the land management plans, and the guidelines and standards prescribed by this subsection." 16 U.S.C. § 1604(g). The Secretary "shall ... incorporate the standards and guidelines required by this section in plans for units of the National Forest System..." Id. § 1604(c). The NFMA further requires standards for timber and transportation management as well as for public participation in forest plans. See id. §§ 1604(m); 1608(c); 1612(a). Further, regulations implementing the NFMA state, "Plans guide all natural resource management activities and establish management standards and guidelines for the National Forest System. They determine resource management practices, levels of resource production and management, and the availability and suitability of lands for resource management." 36 C.F.R. § 219.1(b) (1982). Forest plans must establish "standards and requirements by which planning and management activities will be monitored and evaluated." Id. § 219.5(a)(7) (1982). Standards and guidelines must be "qualitative and quantitative." Id. at § 219.1(b)(12) (1982). Additionally, forest plans must define reasons for management practices chosen for each vegetation type and circumstance. See id. § 219.15

Response:

The Forest Plan was prepared in compliance with the provisions of the 1982 Planning Rule and Southwestern Region planning direction (USDA Forest Service 2009). The 1982 Planning Rule includes the regulations developed to implement the National Forest Management Act. In accordance with NFMA, guidelines and standards are distributed in numerous locations in the plan. Additionally, Chapter 4 of the plan contains suitability analyses for timber, grazing, and recreation and transportation.

Comment:

In addition, the Forest Service is required to identify and plan for management indicator species ("MIS"): In the selection of management indicator species, the following categories shall be represented where appropriate: Endangered and threatened plant and animal species identified on State and Federal lists for the planning area; species with special habitat needs that may be influenced significantly by planned management programs; species commonly hunted, fished, or trapped; non-game species of special interest; and additional plant or animal species selected because population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality. On the basis of available scientific information, the interdisciplinary team shall estimate the effects of changes in vegetation type, timber age classes, community composition, rotation age, and year-long suitability of habitat related to mobility of management indicator species. Where appropriate, measures to mitigate adverse effects shall be prescribed. Id. § 219.19(a)(1) (1982). "Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species." Id. § 219.19(a)(2) (1982). "Population trends of the management indicator species will be monitored and relationships to habitat changes determined. This monitoring will be done in cooperation with State fish and wildlife agencies, to the extent practicable." Id. § 219.19(a)(6) (1982). "Habitat determined to be critical for threatened and endangered species shall be identified, and measures shall be prescribed to prevent the destruction or adverse modification of such habitat." Id. § 219.19(a)(7) (1982)

Response:

There is no requirement to select a management indicator species (MIS) for every ecological response unit (ERU). Rather MIS were selected for ERUs where management activities and restoration objectives are planned and change would be expected during the life of the plan: Ponderosa Pine (Gambel oak sub-type), Mixed Conifer with Aspen, and Mixed Conifer with Frequent Fire ERUs (Mexican spotted owl), Ponderosa Pine (old growth and snags) ERU (pygmy nuthatch), and grassland ERUs (pronghorn antelope). Threatened, endangered, and sensitive (TES) species have individual analyses in the environmental impact statement and the Biological Assessment and Biological Evaluation. Gunnison's prairie dogs are discussed in the Biological Assessment because they are a primary food item for black-footed ferrets as well as in the Final Environmental Impact Statement and the Species Viability Report. Application of the 17 MIS identified in the 1987 plan was found to be less than useful because some species are habitat generalists (e.g., elk use grasslands, woodlands, forests, riparian areas, etc.) so their populations are not closely tied to management in any one habitat or ERU. In addition, population changes of some 1987 plan MIS were too difficult to assess compared to influences (e.g., macroinvertebrates in watersheds that have more influencing factors than can be measured). Additional details on the review of the 17 MIS that are identified under the 1987 plan can be found in the Management Indicator Species Status Report for the Coconino National Forest (USDA Forest Service 2013) found in the plan set of documents. Also, in lieu of selecting for a whole variety of birds that can be influenced by management and a broad range of species associated with water on the Coconino NF, two "ecological indicators" or EIs were selected. Aspen is an ecological indicator of habitat diversity, and early seral stages in the following ERUs: Mixed Conifer with Aspen, Mixed Conifer with Frequent Fire, Spruce-Fir, and in localized areas in Ponderosa Pine. The Monitoring Plan has a question that reads: How much have management activities contributed to maintaining or moving towards desired conditions for aspen? Aquatic macroinvertebrates were selected as an ecological indicator of water quality. The Monitoring Plan has a question that reads: Have management activities contributed to impairment of warm water or cold water streams based on aquatic macroinvertebrate metrics?

Comment:

The draft plan proposes to significantly roll back standards and guidelines in the current Forest Plan (USDA 1987), as amended (USDA 1996), that constrain management of the Coconino National Forest and ensure species viability. It does not meet the statutory and regulatory requirements discussed above. The Forest Service is not writing the plan on a blank slate, but rather it is significantly revising and weakening the existing Forest Plan, which has been in effect for many years. "[A]n agency changing its course must supply a reasoned analysis." *Motor Vehicles Manufacturers Assoc. v. State Farm*, 463 U.S. 29, 57 (1983). The Forest Service must consider the effect of the existing Forest Plan on all NFMA mandates (e.g., species viability), explain why it is changing course by deleting or weakening standards and guidelines, and disclose how those changes will impact the environment. Standards and guidelines in the current Coconino Forest Plan (USDA 1987), as amended, are designed to ensure viability of federally listed and regionally sensitive wildlife populations, as well as continued function of ecological processes associated with old growth forests (USDA 1996). In contrast, the draft plan would repeal virtually all existing standards and guidelines and replace them with vaguely worded "desired conditions" and "objectives," which appear designed to maximize agency discretion and evade public accountability in project-level decision-making affecting management of national forest lands. The Forest Service offers no explanation for the change of course described in the action alternatives (B, C and D).

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: Lininger, Jay

Comment:

Provide specific limitations on future road and other infrastructure projects, especially those that could impact watersheds and riparian habitat (e.g., no net increase of road density in key watersheds).

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Draft

Comment:

Implement ecosystem-level management and restoration to protect and support aquatic and riparian species habitat (i.e., actions that do not meet, or that prevent attainment of ACS objectives, "shall" not be implemented).

Response:

The Forest Plan recognizes the need to maintain, improve, and restore watersheds, riparian areas, and aquatic habitat and their associated species on the Coconino NF. The primary approaches of the plan to address these issues are through ecosystem restoration of the various Ecological Response Units across the landscape, addressing degraded watershed conditions, and improving conditions within riparian areas and their associated aquatic habitats and species. Numerous objectives, desired conditions, standards, and guidelines have been developed for each of these for improving conditions by reducing historical, ongoing, and potential impacts through restoration activities and moving towards desired conditions through project implementation. Although key watersheds have not been specifically designated in the Forest Plan, a guideline in Watersheds and Water would focus watershed restoration and maintenance, and vegetation treatments, on priority 6th code watersheds to ensure that ecosystem processes, resilient vegetation conditions, and natural disturbance regimes are functioning properly. See FW-Water-G-2. Instead of using a "riparian reserve" approach to maintain and restore aquatic habitat, the Forest Plan has direction related to riparian areas, water, watersheds, aquatic habitat and aquatic species in a variety of places, most prominently in Watersheds and Water, Riparian Areas, and Wildlife, Fish, and Plants. Some of the desired conditions and guidelines that promote resiliency, hydrologic, physical, chemical, and biotic integrity, maintenance of physical and natural processes, base flow, riparian communities, groundwater recharge, and species diversity include FW-Water-DC-1, 2, 3, 5, 6, and 7; FW-Water-G-3 and 6; FW-Rip-All-DC-1, 2 and 5, FW-Rip-Strm-DC-1, 2, 3, 4 and G-1, FW-Rip-WtInds-DC-1, 2, FW-Rip-Spr-DC-1, 2, 3, 4, and 5, and FW-Rip-Spr-G-1, 3, and 4, FW-Rip-RipType-DC-1, 2, 4, 5, 6, and G-1, 3, and 4, FW-WFP-DC-3, 4, and 5, FW-Invas-DC-1, 2 and G-1 and 2, FW-Graz-G-4, 5, and 7, FW-RdsFac-G-5 and 9, FW-Rec-All-G-2, and FW-Rec-Disp-G-5. The Forest Plan directs the design and implementation of buffers, called aquatic management zones, in riparian areas to avoid detrimental changes that would seriously and adversely affect water conditions, fish habitat or connected downstream cave, karst, and lava tube resources. See FW-Rip-All-G-3. Aquatic management zones would also be established in non-riparian, intermittent streamcourses to maintain channel functioning, downstream water quality, riparian habitat, and function. See FW-Rip-Strm-G-2. On the Coconino NF, road density and use is addressed through the implementation of the Travel Management Rule and the plan has language to support that implementation. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1. The Forest Plan does not prescribe the scale at which project-level analyses are done, however it does have plan direction that is intended to be applied at all scales. The Forest Plan has objectives to restore the function of non-functioning and functioning-at-risk riparian areas with emphasis on priority 6th code watersheds; to restore 5-10 wetlands not in proper functioning condition; to restore riparian function to at least 25 springs identified as not in proper functioning condition; and to restore or enhance at least 70 miles of stream habitat. See FW-Rip-All-O-1, FW-Rip-WtInds-O-1, FW-Rip-Spr-O-1, and FW-WFP-O-4.

Comment:

The most important thing forest managers can do to mitigate climate change is to protect large, old-growth and mature trees from timber harvest and associated soils from mechanical disturbance (Carey et al. 2001, Luyssaert et al. 2007, Paw U et al. 2004). Preservation of what little old-growth forest remains may have a larger effect on atmospheric carbon cycles than promotion of regrowth (Schulze et al. 2000). Although increased atmospheric concentrations of CO₂ may, under certain conditions, enhance rates of photosynthesis, tree growth, and soil carbon storage (Houpis et al. 1999, Xu et al. 2009), prolonged and intensified drought conditions likely to prevail in the foreseeable future (Seager et al. 2007) also may limit ponderosa pine recruitment (Savage et al. 1996). "There remains uncertainty in how strong the projected drying in the Southwest will be, an uncertainty that includes the possibility that it will be more intense than in the model projections" (Cook et al. 2008:199-200; also see North et al. 2009). Therefore, removal of large, mature or old growth trees may constitute an irretrievable commitment of resources.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third

bullet has been modified to specifically bring attention to climate change):What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes can be attributed to climate change? What modifications are needed to account for these changed conditions?In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time.The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Commenter: Lininger, Jay

Comment:

Create buffer zones for vegetation management and grazing around riparian areas consistent with the ACS discussed above (i.e., riparian reserve).

Response:

The Forest Plan includes direction to identify and maintain buffers, called aquatic management zones, in riparian areas (streams, wetlands, and springs) to avoid detrimental changes that would seriously and adversely affect water conditions, fish habitat or connected downstream cave, karst, and lava tube resources. See FW-Rip-All-G-3. Aquatic management zones would also be established in non-riparian, intermittent streamcourses to maintain channel functioning, downstream water quality, riparian habitat, and function. See FW-Rip-Strm-G-2.

Comment:

The mandatory viability requirement of the 1982 planning regulations require the Forest Service to adopt quantitative standards in forest plans that protect old growth forests and associated wildlife, including northern goshawk and Mexican spotted owl, as currently exist in the amended Forest Plan. Indeed, the Arizona and New Mexico Game and Fish Departments jointly commented to the Forest Service, "The conservation of spotted owl and goshawk habitats is closely related to the conservation of old growth forest ecosystems" (USDA 1995: Appendix F page 8).

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: Lininger, Jay

Comment:

In its December 10, 2010 comment responding to the notice of intent for this plan revision, the Center requested that the Forest Service include an alternative that would provide a substantial increase in protection for plant and animal species, even at the expense of other forest uses. The Center maintains that such an alternative merits consideration due to the current degraded state of some forest ecosystems, foreseeable effects of climate change, and the goal of recovery and de-listing of species currently listed as endangered or threatened under the ESA. Additionally, NFMA requires that the Forest Service provide for the diversity of plant and animal communities based on the suitability and capability of the land. 16 U.S.C. § 1604(g)(3)(B). The Coconino National Forest is a unique ecosystem that is especially suited to supporting biodiversity.

Response:

Since this comment was received in 2010, many components were added to the Forest Plan that would boost protection for plant and animal species and their habitat and boost the consideration of climate change. Many of these components would apply to all alternatives except Alternative A, the current plan as amended. Examples of some of the plan components that support wildlife and plants species, including endemic species, and their habitat are found in the sections on All Ecosystems, Watersheds and Water, Stream Ecosystems, Wetlands, Riparian Forests, Desert Communities, Springs, Alpine Tundra, Wildlife, Fish, and Plants, Invasive Species, Designated Wilderness and Recommended Wilderness. See Fw-Eco-DC-4, FW-BioPhys-Geo-DC-3, FW-BioPhys-G-7, FW-Rip-Spr-DC-2 and 5, FW-Rip-Spr-G-3 and 4, FW-TerrERU-DC-DC-4, FW-TerrERU-AT-DC-2, MA-InBsn-DC-3, FW-WFP-DC-1 through 11, FW-WFP-O-1 through 5, FW-WFP-S-1 and 2, FW-WFP-G-1 through 16, FW-Water-DC-6, FW-Water-G-6, FW-Rip-Strm-G-1, FW-Rip-WtInds-DC-1 and 2, FW-Rip-RipType-DC-2, FW-Rip-RipType-G-2; FW-Invas-DC-1 and 2, FW-Invas-G-1, 2, and 3, SA-Wild-DC-3, and SA-RWild-DC-3. Examples of resiliency, adaptation to change, and consideration of climate change are addressed in FW-Eco-DC-1, FW-Water-DC-1, 3, FW-Water-G-2, FW-Soil-DC-2, FW-TerrERU-All-DC-1 and 4, FW-TerrERU-PP-DC-2, FW-TerrERU-MC-MCFF-DC-4, FW-TerrERU-MC-MCA-DC-4, FW-TerrERU-SF-DC-4, FW-TerrERU-AT-DC-1, FW-WFP-DC-6, and MA-InBsn-DC-1. Besides this, Alternative C was developed to respond to suggestions for more land to be managed in primitive and natural settings with reduced human-related disturbance for the benefit of recreation, botanical, and wildlife resources. Under this alternative, additional wilderness areas would be recommended on the Forest. Also eight management areas were incorporated that reduce public motorized access into certain areas. Alternative C also has the addition of a botanical area adjoining the Cottonwood Basin Geological Area (which has been incorporated into Alternative B (modified), too), prohibits livestock grazing in research natural areas, and recommends restrictions on recreational shooting and snowmobiling in certain areas. Alternative C also responds to ecological concerns related to the distribution and presence or absence of old-growth composition and structure on the landscape.

Comment:

Retention of large trees is fundamentally important to fire resistance of treated stands (DellaSala et al. 2004). Large ponderosa pine and Douglas-fir trees possess autecological characteristics such as relatively thick bark and insulated buds that promote resistance to heat injury (Arno 2000). Self-pruning mature ponderosa pines feature high branch structure and open canopies, which discourage torching behavior and promote capacity to survive and recover from crown scorch (Keeley and Zedler 1998). Thus, large tree structure enhances forest resistance to severe fire effects (Arno 2000, Omi and Martinson 2002, Pollett and Omi 2002), whereas removing them may undermine fire resistance (Brown et al. 2004, Naficy et al. 2010). Research demonstrates no advantage in fire hazard mitigation resulting from treatments that remove large trees compared to treatments that retain them. Treatments that removed only trees smaller than 16-inches diameter were marginally more effective at reducing long-term fire hazard than so-called "comprehensive" treatments that removed trees in all size classes (Fiedler and Keegan 2002). Thinning small trees and pruning branches of large trees to increase canopy base height significantly decreases the likelihood of crown fire initiation (Graham et al. 2004, Keyes and O'Hara 2002, Omi and Martinson 2002, Perry et al. 2004, Pollett and Omi 2002), which is a precondition to active crown fire behavior (Agee 1996, Graham et al. 2004, Van Wagner 1977). Low thinning and under-burning to reduce surface fuels and increase canopy base height at strategic locations effectively reduces fire hazard at a landscape scale and meets the purpose and need. Large trees are not abundant at any scale in ponderosa pine or mixed conifer forests in the Southwestern Region (Covington and Moore 1994, Fulé et al. 1997, USDA 1999, USDA 2007, USDI 1995). They are the most difficult of all elements of forest structure to replace once they are removed (Agee and Skinner 2005). The ecological significance of old growth forest habitat and large trees comprising it is widely recognized (Friederici 2003, Kaufmann et al. 1992). There is no scientific basis for extracting large trees to promote fire resistance in ponderosa pine and mixed conifer forest (Allen et al. 2002, Brown et al. 2004, DellaSala et al. 2004). In addition to their rarity, a variety of factors other than logging threatens the persistence of the remaining large trees in Southwestern conifer forests. Prescribed fire can injure exposed tree roots that have migrated into accumulated duff layers and cause high levels of post-treatment mortality among large trees (Sackett et al. 1996). Burning of pine stands with high surface fuel loading also can produce high fireline intensities and result in large tree mortality due to cambial injury by heat (Hunter et al. 2007). Prescribed fire also may render large trees susceptible to delayed bark beetle infestation (Wallin et al. 2003). In addition, large tree mortality has indirectly resulted from mechanical thinning activities (Hunter et al. 2007). Large standing dead trees ("snags") and downed logs supply critical habitat for primary and secondary cavity-nesting species (including threatened Mexican spotted owl and its prey) and may be destroyed by fuel treatments (Hunter et al. 2007). Prescribed fire may create coarse woody habitat by killing live trees, but gains generally do not offset losses, as existing coarse wood is irretrievably destroyed (Randall-Parker and Miller 2002). Recruitment of large trees, snags and large woody debris will become more limiting over time as climate change imposes chronic drought, reduced tree growth rates, and more widespread tree mortality (Diggins et al. 2010, Savage et al. 1996, Seager et al. 2007, van Mantgem et al. 2009, Williams et al. 2010). McHugh and Kolb (2003) describe unplanned and prescribed fire effects on ponderosa pine forest structure in northern Arizona reflecting a "U-shaped" tree mortality curve in which mortality was lowest among trees sized 30 - 60 centimeters ("cm") (approx. 12" - 24") diameter, and highest among the smallest trees as well as in the 75 - 80 cm (~29.5" - 31.5") diameter (Figure 3). Resistance to fire-induced mortality was greatest among trees sized 35 - 75 cm diameter. Mortality effects occurred despite relatively uniform "crown damage" across tree size classes, indicating that cambial injury and root scorch fire effects were most significant among the smallest and largest trees, whereas intermediate-sized trees were relatively uninjured and may have benefited from the disturbance (McHugh and Kolb 2003). A large tree retention alternative would maintain trees that are most likely to survive fire injury and supply recruitment structure that will support the recovery of old growth forest habitat in the future. If significant reductions of crown bulk density are necessary to meet the need for change then it is unlikely that the revised forest plan will maintain habitat for threatened and sensitive wildlife species associated with closed-canopy forest (Beier and Maschinski 2003, Keyes and O'Hara 2002, USDI 1995). Large tree removal reduces forest canopy and diminishes recruitment of large snags and downed logs, which in turn affects long-term forest dynamics, stand development, and wildlife habitat suitability (Quigley et al. 1996, Spies 2004, van Mantgem et al. 2009). A large tree retention alternative would maintain wildlife habitat in the short-term and mitigate adverse direct and indirect effects of proposed treatments. A variety of factors other than logging threaten the remaining large trees in southwestern ponderosa forests. Prescribed fire treatments can damage tree roots and

cause high levels of mortality among large trees (Sackett et al. 1996). Burning of pine stands with high surface fuel loading also can result in tree mortality (Hunter 2007), and fire treatments may leave trees susceptible to bark beetle infestation (Wallin et al. 2003). Additionally, large tree mortality has unintentionally resulted from mechanical thinning projects (Hunter 2007). Large snags and downed logs, which provide critical habitat for cavity-nesting birds, bats, small mammals, reptiles, amphibians and insects, are often destroyed by fuel reduction treatments (Hunter 2007). Any gains in

Figure 1. Tree size class distribution in southwestern ponderosa pine forests. Source: USDA (1999, 2007). new snags and downed logs as a result of vegetation treatments generally do not offset their loss at a landscape scale (Randall-Parker and Miller 2002). Hence, the continued existence of large trees and snags for purposes of old-growth function and adapted ecological processes is by no means assured. Considering their scarcity, as well as the unique services they provide, large trees should be preserved whenever possible. Because large trees are the most difficult of all forest structural elements to replace, logging them constitutes an irreversible environmental impact that is scientifically controversial in regards to its efficacy in fire hazard reduction and forest restoration (Agee and Skinner 2005, Brown et al. 2004). Please refer to the series of Forest Service reports on Small-Diameter Success Stories (Livingston 2004, 2006, 2008) demonstrating social consensus and market opportunities for stewardship activities, including the White Mountains Stewardship Project on the Apache-Sitgreaves National Forests, which are focused on small-diameter thinning as a vital element of hazardous fuels reduction and ecological restoration.

Response:

No change to the Forest Plan has been made in response to this comment. The Forest Plan emphasizes old growth structure throughout the landscape including old trees, and promotes replacement trees so that old growth is sustained over time. See FW-TerrERU-PP-DC-5, 6, and 9. Guidelines would protect old growth structure from uncharacteristic natural disturbances and develop it where lacking. See FW-TerrERU-PP-G-1 and 2. Guideline 3 in this same section provides guidance for retaining pre-settlement trees, often the largest, oldest, and tallest trees. See FW-TerrERU-PP-G-3. The plan does not preclude the use of the stakeholder developed Old Growth Retention Strategy at the project level.

Commenter: Lininger, Jay

Comment:

The direction of fire spread (backing, flanking, heading) is an important consideration because fire interacts with weather, topography and vegetation to "back" and "flank" around certain conditions, or "head" through others as it spreads (Graham et al. 2004). Steep slopes can facilitate wind-driven convection currents that drive radiant heat upward and bring flames nearer 11 Gorte, R.W. 2000. Memorandum on Timber Harvesting and Forest Fires. Congressional Research Service, Library of Congress: Washington, D.C. August 22. Attached for convenience and available at: <http://cnie.org/NLE/CRSreports/Forests/for-30.cfm> (accessed April 25, 2013). to adjacent, unburned vegetation, thus pre-heating fuels and amplifying fire intensity as it spreads upslope (Whelan 1995). As a result, severe fire effects often are observed to concentrate at upper slope positions and on ridges, whereas such effects are relatively rare on the lee side of slopes that do not directly receive frontal wind (Finney 2001). Therefore, fuel treatments should be oriented in concert with prevailing spatial patterns of fire spread in the project area. Overlapping fuel treatments that reduce fuel continuity can fragment extreme fire effects into smaller patches if they disrupt heading fire behavior and increase the area burned by flanking and backing fires (Finney 2001). Slope aspects facing away from frontal or diurnal winds are a lesser treatment priority because backing fires are the most likely to exhibit mild intensity and effects. The Forest Service should analyze these factors and demonstrate that proposed fire management program will meet the need for change. An additional approach to the strategic location of fuel treatments is to identify landscape features that are currently resistant to severe fire effects and use them as anchor points for a compartmentalized landscape fire management strategy. Such features may include natural openings, meadows, relatively open ridges, moist riparian areas, mature forest patches with shaded and cool microclimates and little or no history of past logging (Naficy et al. 2010), and areas where fuel treatments already have been completed. Those features can support the strategic use of fire for resource benefits, application of confinement and containment strategies as alternatives to full control of unplanned fires, and provide safe areas for workers to ignite prescribed fires for hazard reduction and ecological process restoration. The analysis should consider such factors. Finally, in our view, the Forest Service should prioritize fuel treatments at locations where relatively little resource investment may create fire resistant conditions in the shortest amount of time. Targeting initial work in this way will maximize the area treated with available funds and personnel, and provide the greatest opportunity to quickly reduce fuels and restore ecosystem function at larger spatial scales. It is not clear that the Forest Service has given its own research on this point requisite consideration in the PDEIS.

Response:

The Forest Plan contains objectives to treat vegetation using fire treatments. See FW-TerrERU-PJ-O-3, FW-TerrERU-PP-2 and 3, and FW-TerrERU-MC-MCFF-2 and 3. The priority for restoration treatments (including fuel treatments) is to treat priority watersheds. See FW-Water-G-2. Different approaches for the strategic location of fuels treatments would be identified during the Forest's annual and out-year program of work development. Costs (based on location, extent of treatment) and benefits of implementing treatments would be considered before selecting specific locations to treat.

Commenter: Lininger, Jay

Comment:

We recommend, consistent with the position of the Arizona and New Mexico Game and Fish Departments presented above, that the revised forest plan should contain goals and standards for maintaining and developing well-defined blocks of old growth forest in each project-level assessment area, in each Ranger District, and throughout the Coconino National Forest to insure a broad spatial distribution of old growth ecosystems across the landscape. See USDA (1995: Appendix F page 17).

Response:

Plan components for the growth, maintenance, and protection of old growth is in numerous location in the Forest Plan including but not limited to FW-TerrERU-DC-PP-6, 7, and 9, FW-TerrERU-G-1, 2, and 4. Additional plan components relating to a pre-settlement tree strategy can be found in FW-TerrERU-G-3, FW-TerrERU-MC-MCFF-DC-2 and 4, FW-TerrERU-MC-MCA-DC-2 and 4, FW-TerrERU-MC-All-G-2 and 3, and FW-TerrERU-DC-SF-2, 4, and 11. The Forest Plan's approach is that each ERU has a mosaic of vegetation conditions, densities, and structures, at a variety of scales across landscapes and watersheds, reflecting the natural disturbance regimes. See FW-TerrERU-All-DC-1. This mosaic is across the ERU and varies between ERUs depending in a large part on the natural disturbance regime. For example, Ponderosa pine old growth structure would be scattered across the landscape consistent with low severity frequent fire return intervals, whereas old growth in Mixed Conifer with Aspen would be in larger patches consistent with a mixed to high severity infrequent fire return interval. Old growth would be assessed at the project-level but the Forest Plan does not require it to be allocated at the project or district level.

Comment:

Standards and guidelines should specifically address the problem of fragmentation of old growth habitat caused by past even-aged timber management and road construction, and apply spatially-explicit analysis demonstrating that functional old growth ecosystems will be sustained over time under any chosen management alternative.

Response:

No change has been made to the Forest Plan in response to this comment. The fragmentation concept is not applicable for frequent fire forests in the Southwest such as ponderosa pine; it is applicable to infrequent-fire forest ecosystems where large blocks of even-aged old growth develops and persists over long periods of time (e.g., coastal Douglas-fir or high-elevation spruce-fir), based on the ecology of those forests. In southwestern frequent-fire forests, old growth is naturally fragmented, and occurs as tree groups, clumps, individual trees, and occasional patches in an uneven-aged forest landscape (Reynolds et al., 2013). Desired conditions in Mixed Conifer with Aspen ERU and Spruce-Fir ERU promote large areas of old growth structure because these two ERUs have longer fire return intervals and different fire regimes than the frequent fire regime of ponderosa pine. See FW-TerrERU-MC-MCA-DC-1 and 2 and FW-TerrERU-SF-DC-2. Old growth patch sizes in Pinyon Juniper Woodland ERU can also be large. See FW-TerrERU-PJ-DC-10. The revised plan has numerous plan components that focus on functioning ecosystems and sustaining ecosystems processes and contributions. An example is a desired condition in All Ecosystems (FW-Eco-DC-1) which states: Within their type and capability, ecosystems are functioning properly, provide habitat for native species, and are resilient to natural disturbances (e.g., flooding, fire, and periodic drought) and climate change. Ecosystem processes and contributions (e.g., nutrient cycling, water infiltration, and wildlife habitat) are sustained as vegetation on the forest adapts to a changing climate. Inherent in the concept of having sustainable ecosystems is having a mosaic of vegetative conditions, at a variety of scales and watersheds, which reflect natural disturbance regimes that are functioning properly within their type and capability and that are resilient to the frequency, extent, intensity, and severity of disturbances. Vegetative conditions include old growth, as well as the younger age classes, which are integral to having old growth through time. This is exemplified by desired conditions in the All Terrestrial ERU section - FW-TerrERU-All-DC-1 and 2; FW-TerrERU-MC-MCFF-DC-4; FW-TerrERU-MC-MCA-DC-4; FW-TerrERU-SF-DC-1. Forest and woodland ERUs have desired conditions to have old growth components scattered across the landscape. For example, see FW-TerrERU-PJ-DC-7 and 11; FW-TerrERU-PP-DC-5, 6, FW-TerrERU-MC-MCFF-DC-3; and FW-TerrERU-SF-DC-2 and 3. The revised plan recognizes that the location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality), such as in FW-TerrERU-PP-DC-6, FW-TerrERU-PJ-DC-5; FW-TerrERU-MC-DC-2; and FW-TerrERU-MC-MCA-DC-2. Yet the protection and retention of old growth is also addressed as is the development of old growth conditions where it is currently lacking. See FW-TerrERU-PP-G-1, 2, 3, 4, and 5; FW-TerrERU-PJ-G-5; and FW-TerrERU-MC-MC-All-G-3.

Commenter: Lininger, Jay

Comment:

The revised forest plan also should include standards and guidelines that require assessment and designation of old growth habitat at site, watershed, and ecosystem scales, and allow management treatments within identified old growth only to enhance old growth characteristics, such as primary ecological functions mediated by fire.

Response:

The Forest Plan does not direct projects on how to inventory old growth and instead relies on the projects to determine how to inventory and assess old growth depending on the scale and type of project and information available. The Forest Plan focuses on desired conditions. The Forest Plan's desired conditions were developed to provide for a flow of old-growth conditions and function over time and space that reflect natural disturbance regimes at a variety of scales. These scales can include individual trees or groups, stands, or large areas which could incorporate one or more watersheds. This could correlate with site and watershed scales mentioned in the comment and even the ecosystem scale depending on the disturbance. Ecological functions mediated by fire and other natural disturbances include the presence and distribution of coarse woody debris, downed logs, snags, and older declining trees. The desired conditions provide for the presence of these characteristics, as well as spatial shifting or transition of old growth on the landscape over time, reflecting natural disturbance regimes. Plan components for the growth, maintenance, and protection of old growth is in numerous location in the Forest Plan including but not limited to FW-TerrERU-DC-PP-6, 7, and 9, FW-TerrERU-G-1, 2, and 4. Additional plan components relating to a pre-settlement tree strategy can be found in FW-TerrERU-G-3, FW-TerrERU-MC-MCFF-DC-2 and 4, FW-TerrERU-MC-MCA-DC-2 and 4, FW-TerrERU-MC-All-G-2 and 3, and FW-TerrERU-DC-SF-2, 4, and 11. That said, desired conditions focus on a spectrum of vegetative age classes and structure which are inclusive of, but not exclusive to, old growth. Specific treatments might be needed where existing conditions differ from desired conditions. This would be decided at the project-level.

Commenter: Lininger, Jay

Comment:

Such deferral also should apply a process-centered approach to restoration in old growth ecosystems emphasizing use of naturally-adapted fire disturbance, rather than a structurally- oriented approach that presumes to replicate spatial patterns of old growth that may have existed at any given time in history (Falk et al. 1996).

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan provides the framework for projects to select the most effective treatment (mechanical, prescribed fire, or a combination of the two) to move towards desired conditions for the various ERUs. Decisions to treat, and how to treat, old growth ecosystems are based on site specific analysis and made at the project level.

Commenter: Lininger, Jay

Comment:

The Center strongly recommends deferral of all old growth forest that meet standards and guidelines set forth in the current Forest Plan (USDA 1987), as amended (USDA 1996), from designation as suitable for timber harvest.

Response:

Timber suitability classification was conducted in compliance with the provisions of the 1982 Planning Rule and Southwestern Region planning direction (Forest Service, 2009). It is based on land availability, capability, operability, management area objectives and requirements, and the economic feasibility of the land. See the Timber Suitability Calculation section in Appendix G of the environmental impact statement and the Timber Suitability section in the Vegetation and Fire Specialist Report (Forest Service, 2015). Also see the Timber Suitability section in Chapter 4 of the Forest Plan. For any one location, the timber suitability classification is made irrespective of the current forest structure. For example, areas that are currently un-forested can still qualify as suitable for timber production, provided that the underlying land meets the requirements for availability, growing capability, operability, and economic feasibility. However, if during the forest plan revision process, specific proposed management direction is incompatible with timber production, then those affected areas will be excluded from the suitable timber base. This is the case for areas designated as developing or existing old growth under alternatives A and C. Under alternatives A and C, the standards and guidelines for old growth set forth in the current 1987 plan, as amended in 1996, would be carried forward into the new plan. In Ponderosa pine and mixed conifer forests, the emphasis under the 1987 plan is placed on creating and maintaining large stands (100-300 acres) or large aggregations of contiguous stands that all have the full suite of old growth characteristics (1987 Plan, new page 70-2; 129; 138). The effects of this proposed plan direction is fully considered in the Vegetation and Fire Specialist Report (Forest Service, 2015). Generally, within the Ponderosa pine and mixed conifer forests, the 1987 plan direction would encourage a forest structure that does not match the historic condition or the desired conditions. Larger areas with a closed canopy and a more even-age structure would occur across the landscape; yet this structure is not supported by the best available science that is specific to southwestern frequent fire forests (Reynolds et al. 2013). Alternatives B and D provide direction with regard to old growth that is based on the best available science. Under these alternatives, old growth components (e.g. old trees, snags, large logs) within frequent fire ERUs should be scattered throughout the landscape, including old tree groups and single old trees intermixed with other age classes. Occasionally, old growth components may also occur in small even-aged patch of trees. The Forest Plan provides direction to manage for well-distributed occurrences of old growth. For example, several plan components in the All Terrestrial ERUs section (FW-TerrERU-All-DC-1, 2, and 4) express desires for: Each ERU contains a mosaic of vegetation conditions, densities, and structures. This mosaic occurs at a variety of scales across landscapes and watersheds and reflects the natural disturbance regimes affecting the area. Within their type and capability, terrestrial ERUs are functioning properly and are resilient to the frequency, extent, intensity, and severity of disturbances, such as fire in fire-adapted systems, and adapt to climate variability. Natural and human disturbances provide desired overall plant density, species composition (i.e. mix of species), structure, coarse woody debris, and nutrient cycling. Desired disturbance regimes, including fire, are restored where practical. Vegetation conditions allow for inclusions and variability within the landscape as well as for transition zones or ecotones between riparian areas, forests, woodlands, shrublands, and grasslands. Transition zones shift in time and space due to factors affecting site conditions (e.g. fire, climate). Stringers persist where they naturally occur. For example, pine stringers are noncontiguous narrow communities of pine (often large old trees) that extend into lower elevation vegetation. Most importantly though, there are specific desired conditions at the landscape scale, mid-scale, and fine scale that provide for old growth forest structures in the relevant ERUs. See FW-TerrERU-PP-DC-6, 9, and 13 and FW-TerrERU-MC-MCFF-DC-2, 7, and 10. The Forest Plan also contains guidelines specifically designed to protect, perpetuate, restore, and promote old growth characteristics in these ERUs. See FW-TerrERU-PP-G-1, 2, 3, and 4, FW-TerrERU-MC-All-G-2 and 3.

Commenter: Lininger, Jay

Comment:

Require monitoring of listed-species habitat and aquatic resources, including surface waters and groundwater (i.e., site-specific activities "shall" include monitoring of effects to listed species and aquatic resources).

Response:

The propriety and amount of monitoring that should be conducted on site-specific actions varies based on the site-specific action and is determined through the analysis associated with that site-specific action.

Draft

Comment:

The draft plan does not propose adequate direction to ensure that management will meet the species viability requirement of the NFMA. In this plan revision, the Forest Service relies upon "desired conditions" to accomplish the need for change. See DEIS at 5 ("Desired conditions, goals, and objectives express an aspiration and form the basis for projects, activities, and uses that occur under the forest plan"); also see Draft Plan at 5 ("Desired conditions are the focus of this plan; management of the Coconino NF's resources will be directed toward achieving the desired conditions. Desired conditions are the basis for the other plan components and describe the framework for future projects and activities"). It defines desired conditions as: Desired conditions (or goals) set forth the desired social, economic, and ecological goals of the Coconino NF. They attempt to paint a picture of what we (the public and the Forest Service) desire the forest to look like or the goods and services we desire it to provide. Desired conditions are generally expressed in broad, general terms; however, more specificity may be added to clarify the intent. Desired conditions are timeless in that there is no specific date by which they are to be completed. They may only be achievable over a long timeframe (e.g., several hundred years). Draft Plan at 5.4 In site-specific actions, "management activities affecting the Coconino NF must be consistent with the plan." Id. 9. Consistency with plan direction is to be achieved as such: Management activities are developed specifically to achieve the desired conditions (goals) of the plan. To the extent practicable, documentation for such projects should identify the elements of the desired conditions to be achieved by the project. All projects or activities may not contribute to all desired conditions or objectives but rather to a limited subset. Also, some projects designed to contribute to some desired conditions may have consequences considered adverse to the achievement of other desired conditions. In this situation, the responsible official for the project needs to identify and disclose these effects in the project documentation and make a decision that balances these considerations. Id. 9 [emph. added]. The Draft Plan contemplates that management actions will sometimes conflict with the desired conditions. It further assumes that many of the desired conditions will not be realized during the life of the revised plan. Therefore, desired conditions are not enforceable and would not affect project-level forest management.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of

removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: Lininger, Jay

Comment:

Habitat proxy The Forest Service proposes in the draft plan to meet its obligation under NFMA to ensure species viability by managing habitat at broad scales, i.e., by moving toward desired conditions for each potential natural vegetation type ("PNVT") in the Coconino National Forest. It applies a novel screening process for groups of species associated with each PNVT, and avoids focused analysis of minimum viable populations or habitat distribution of any particular species. The draft plan considers only the overall amount of habitat, defined as acres within each PNVT and their relative degree of departure from an historic range of variability ("HRV"), as a 10 See notes of Arizona Game and Fish Department Region II Commission Briefing, July 27, 2007. In it, the Department explains, "the Management Recommendations for the Northern Goshawk in the Southwestern United States (GTR-RM-217) defines northern goshawk habitat through the structural habitat attributes of 14 of the hawk's prey species. The canopy cover data described for these prey species, and for the northern goshawk, were measured at the stand level - not the tree group level. By changing the canopy cover targets from the stand level to the group level, the Department is concerned that the Forest Service may not be meeting the habitat requirements for those 14 wildlife species, and also may not be meeting the habitat requirements for the northern goshawk per the 1996 Forest Plan Amendment." surrogate for analysis of populations of sensitive species whose viability is of planning concern. By assuming full occupancy of at-risk species in each PNVT, the Forest Service overestimates the effectiveness of its habitat-based proxy for maintaining viability. The agency recognizes that it has little or no information about sensitive species populations. Not all acres of each PNVT are likely to be occupied by species whose actual distribution and habitat use is likely to be more limiting than assumed by the analysis.

Response:

In evaluating species viability, a coarse filter/fine filter approach was used. Each evaluated species was associated with its primary habitat (the coarse filter) which could be an ERU or riparian area, and primary threats to the habitat were identified. An estimate was made as to the amount of occupied habitat as well as the amount of potentially suitable habitat for each species. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the revised plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. Management approaches were generally developed to address threats for which the Forest Service does not have complete jurisdiction. However, the coarse filter/fine filter approach does not assume that habitats are a proxy for viability, nor is the viability analysis process a habitat proxy. In addition, there is no National Forest Management Act (NFMA) requirement to spatially demonstrate adequate habitat for each species and the Vegetation Dynamics Development Tool (VDDT) modeling is not spatially explicit. The viability analysis grouped species by the ERUs or habitat element(s) they rely on for habitat. Other wildlife specialist reports assessed these species relative to requirements based on their status (e.g., federally listed, Southwestern Region sensitive species, management indicator species, etc.). For example, federally listed species were also analyzed in accordance with Endangered Species Act requirements in the biological assessment. The analysis of species viability was conducted as directed in accordance with National Forest Management Act (36 CFR § 219.19) that defines a viable population as, "one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning areas." This species viability analysis is not population viability analysis which is the probability of a population persisting for a biologically meaningful timeframe and which often seeks to identify a minimum number of individuals for population persistence.

Commenter: Lininger, Jay

Comment:

The draft plan proposes to repeal or weaken standards and guidelines of the current Forest Plan (USDA 1987), as amended (USDA 1996), that bind project-level management of habitat for sensitive northern goshawk. Specifically, it omits standards and guidelines for management of ponderosa pine forest structure contributing to nesting, fledging and foraging habitat. The current Forest Plan incorporates the Management Recommendations for the Northern Goshawk in the Southwestern United States (Reynolds et al. 1992), which quantifies structural attributes of habitat essential to viability of northern goshawk and 14 vertebrate prey species. The Forest Service previously based action alternatives in two prior environmental impact statements about forest planning on those recommendations (USDA 1995, 2006). It further established a habitat-proxy relation of ponderosa pine forest structure to viability of northern goshawk, and a proxy-on-proxy relation of goshawk habitat to viability of 14 prey species, which courts have deemed legally sufficient. In contrast, the draft plan proposes only desired conditions and objectives to replace existing standards and guidelines that assure viability of goshawk and its prey. The draft plan components are nearly identical to those proposed by other national forests in Arizona, except that they are even more discretionary than proposed by other national forests, indicating a regionally-orchestrated agenda to evade public accountability at the expense of species viability. The draft plan proposes no binding standards or discretionary guidelines for management of northern goshawk habitat. Notably, it omits any requirement to survey for goshawks prior to habitat disturbance, monitor populations or retain structural attributes of ponderosa pine forest (e.g., canopy cover) essential to nesting and fledging behaviors of the sensitive species, in contrast to the existing Forest Plan, as amended (USDA 1996). In addition, the draft plan proposes "fine scale" desired conditions (less than 10 acres) for ponderosa pine forest that include retention of trees within groups typically less than 1 acre each consisting of approximately 2 to 40 trees with interlocking canopies. The Arizona Game and Fish Department expressed concern to the Forest Service that management of uneven-aged ponderosa pine forest structure, including canopy cover, at small tree "group" scales instead of at larger (10-40 acre) stand scales has the potential to significantly reduce the amount of forest cover with potentially negative consequences for goshawk and its prey.¹⁰ For example, assuming a residual canopy cover of 50 percent within tree groups (<1 acre), and if such groups occupy 50 percent of a stand, canopy cover at the stand scale will be 25 percent or less. To prevent this outcome, which clearly would harm goshawk and its prey, Reynolds and others (1992) recommended, and the amended Forest Plan (USDA 1996) requires, maintenance of canopy cover in mid- to old-aged stands that host goshawk nesting and fledging habitat. The Forest Service is required by NFMA and NEPA to address changes in management direction affecting northern goshawk habitat and potential effects to the environment.

Response:

Northern goshawks and structure specific to their foraging areas, nesting areas, and post-fledgling areas is incorporated into the desired conditions for the Ponderosa Pine, Mixed Conifer Frequent Fire, Mixed Conifer with Aspen and Spruce Fir ERUs and a guideline in the Wildlife, Fish, and Plants section. See FW-TerrERU-PP-DC-12, FW-TerrERU-MC-MCFF-DC-9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-10, and FW-WFP-G-14.

Commenter: Lininger, Jay

Comment:

The Forest Service should study, develop and describe an action alternative that gives the decision-maker and the public a meaningful basis for comparison of impacts that may result from the revised forest plan to MSO and its critical habitat. At minimum, such an alternative should, consistent with the best available science: * Implement existing standards and guidelines for MSO habitat (USDA 1996). * Limit new road construction in PAC (USDI 2012a). * Apply fuel treatment concepts to minimize risk of stand-replacing fire in PAC, including large tree retention, management of surface fuels and sub-canopy forest structure, and spatial orientation of treatments, as described infra. * Emphasize spatial orientation of fuel treatments in MSO habitat consistent with findings and recommendations of Northern Arizona University Forest Ecosystem Restoration Analysis (Prather et al. 2008). Prather and others (2008) is relevant to this analysis because it is: (1) specific to dry mixed conifer, wet mixed conifer and ponderosa pine vegetation types that comprise MSO critical habitat in the planning area; (2) consistent with the need for change; (3) representative of best available science; and (4) offers a meaningful basis for comparison of the intensity of environmental impacts that may result from this plan revision. "[E]ven without application of treatments that would seriously affect MSO habitat, managers could achieve approximately 60% of the fuels reduction that would be achieved if there were no restrictions on treatments. With reasonable tradeoffs considered in planning, such as largely treating in lower suitability owl habitat, this figure would rise to over 80%" (Prather et al. 2008: 148). "When conservation and restoration planning is scaled-up from a stand to landscape scale, many apparent conflicts disappear as management actions are spatially partitioned and prioritized" (Prather et al. 2008: 149).

Response:

A-5 This alternative was considered but eliminated from detail study. See the "Alternatives Considered but Eliminated from Detailed Study" section in chapter 2 of the EIS under the "Alternative to Compare Viability for the Mexican Spotted Owl" header. The implementation of 1987 plan standards and guidelines is considered in the analysis of alternative A in the EIS. The plan provides direction that projects and activities would be managed consistent with the Mexican spotted owl recovery plan, including constraints on road construction and fuel treatments. Methodologies for fuel treatment modeling would be determined by the responsible official on a site specific basis. The Northern Arizona University Forest Ecosystem Restoration Analysis may be used if determined applicable.

Comment:

The draft plan omits current (USDA 1996) standards and guidelines that (1) require survey of suitable MSO habitat for presence of the bird and designation of PAC where it occurs; (2) forbid vegetation treatments in nest cores and allow limited treatments in PAC; (3) require selection of an equal number of PAC as untreated control areas when treatments are done; (4) prohibit harvest of trees larger than 9-inches diameter in PAC; (5) maintain a portion of "target/threshold" habitat suitable for nesting/roosting behaviors and retain at least 150-170 ft²/acre basal area and 20 trees/acre larger than 18-inches diameter at breast height; (6) retain trees larger than 24-inches diameter at breast height in suitable nesting/roosting habitat (i.e., "restricted areas"); and (7) require monitoring of habitat and population trends. See USDA (1996: 87-91). Repeal of standards and guidelines affecting MSO can be viewed as a negative effect of the draft plan, which will result in an actual physical effect on the environment. See *Citizens for Better Forestry v. U.S. Dept. of Agriculture*, 341 F.3d 961, 973 (9th Cir. 2003). Weakening standards in a forest plan may significantly impact the environment at a site-specific level. *Id.* at 975; also see *Motor Vehicles Manufacturers Assoc. v. State Farm*, 463 U.S. 29, 57 (1983) ("[A]n agency changing its course must supply a reasoned analysis"). The Forest Service must disclose effects of the existing Forest Plan (USDA 1987), as amended (USDA 1996), on MSO viability and recovery, and explain why it is changing course by repealing or weakening current standards and guidelines. The efficacy of proposed management direction in promoting the conservation and recovery of MSO is uncertain (USDI 1995, USDI 2012a). The Forest Service is required by NEPA to disclose controversy and uncertainty regarding effects to MSO and its critical habitat.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

Recovery plans for federally listed species (e.g., USDI 2012a) are not enforceable in project-level management decisions. Referencing them in discretionary guidelines of a revised forest plan fails to ensure viability or avoid jeopardy or destruction or adverse modification of critical habitat. See USDI (1996a: 39) (MSO jeopardized and critical habitat adversely modified where forest plans "lack the management direction to prevent the development of forest project- level activities that are likely to adversely affect the Mexican spotted owl," and stating, "[S]tandards and guidelines are, 'the bounds or constraints within which all management activities are to be carried out in achieving forest plan objectives.'"); also see USDI (1996b: 29) (concluding no-jeopardy to MSO and no adverse modification of critical habitat because the Forest Service applied recovery plan recommendations as non-discretionary standards and guidelines in forest plans).

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

Mexican spotted owl ("MSO") is listed under ESA as "threatened" with critical recovery 6 The scope, placement, duration and intensity of most foreseeable management activities on national forest lands, including road construction and timber harvest, would be subject to the unlimited discretion of the Forest Service. habitat in the Coconino National Forest. It is proposed as a management indicator species ("MIS") in the draft plan. There can be no reasonable assurance that the draft plan will assure MSO viability or recovery where the Forest Service admits uncertainty regarding owl habitat and population trends and simultaneously admits that implementation of the revised plan may "adversely affect" the species and/or result in incidental take (USDI 2012b, 2005). In October 2008, the Southwestern Regional Office of the Forest Service produced an "Annual Report" to the U.S. Fish and Wildlife Service ("FWS") regarding implementation of forest management plans, including the Coconino Forest Plan, and effects to MSO and other ESA-listed species, for the period of June 10, 2005, through June 10, 2007.7 In it, the Forest Service acknowledged failure to comply with mandatory terms and conditions established in the June 10, 2005, biological opinion and incidental take statement of the FWS that required monitoring of MSO populations and habitat trends (USDI 2005). The Forest Service admitted that it monitored only 20-to-25 percent (20-25%) of known Protected Activity Centers ("PAC") for owl occupancy, and it monitored no PAC for owl reproduction or juvenile dispersal. In addition, the Forest Service stated that it "likely" exceeded the permitted number of incidental take of MSO. On April 17, 2009, the Forest Service asked the FWS to reinitiate consultation regarding continued implementation of forest plans in the Southwestern Region, including the Coconino Forest Plan, as required by the ESA. That letter stated, "It has now become apparent that the Forest Service will likely soon exceed the amount of take issued for at least one species, the Mexican spotted owl."8 More, "[I]t has become apparent that the Forest Service is unable to fully implement and comply with the monitoring requirements associated with the Reasonable and Prudent Measures for several species (including MSO) in the [biological opinion]." On June 22, 2010, the FWS reinitiated consultation with the Forest Service regarding effects of continued implementation of forest plans, including the Coconino Forest Plan, on ESA-listed species.9 Pursuant to that consultation, on March 30, 2012, the FWS produced a new biological opinion and incidental take statement for MSO that is specific to the Coconino National Forest. That opinion and statement (USDI 2012b) eliminated mandatory terms and conditions that previously required the Forest Service to monitor MSO habitat and populations, and replaced them with a more modest requirement to report incidental take (i.e., PAC disturbance). The FWS broke precedent and fragmented its consultation on MSO by issuing a separate biological opinion and incidental take statement for each national forest, including the Coconino National Forest. None of the forest-specific biological opinions on implementation of forest plans in the Southwestern Region account for range-wide impacts to MSO and critical habitat, and none require monitoring of population or habitat trends, which remain unknown. Forest Service compliance with terms and conditions of the March 30, 2012 biological opinion 7 USDA Forest Service. 2008. Annual Report Covering the Period June 10, 2005 - June 10, 2007, Programmatic Biological Opinion on the Land and Resource Management Plans for the 11 National Forests in the USDA Forest Service Southwestern Region. Albuquerque, NM. October. 110 pages. 8 Corbin Newman, Southwestern Regional Forester, letter to Benjamin Tuggle, Director, FWS Southwestern Region, requesting re-initiation of Consultation #2-22-03-F-366. April 17, 2009. 2 pages. 9 U.S. Fish and Wildlife Service letter, to Corbin Newman, Regional Forester, USDA Forest Service re: Cons. # 2-22-03-F-366, June 22, 2010. Region 2: Albuquerque, NM. 3 pages. and incidental take statement for the Coconino National Forest, and any similar incidental take statement issued for this plan revision, will not avoid jeopardy to MSO or adverse modification of critical habitat because the conservation status of the threatened species and the effect of habitat management throughout its range is unknown.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest

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Comment:

Clear and binding standards and guidelines are essential to the continued viability of many endangered, threatened and sensitive species whose viability is in doubt. However, the draft plan largely proposes to address threats to the viability of threatened, endangered and/or sensitive species through components other than standards and guidelines. Where it proposes guidelines, the draft plan merely suggests that forest managers "should" consider them in project-level decisions. See, e.g., draft plan at 74 ("Habitat management objectives and species protection measures from approved recovery plans should be applied to activities occurring within federally listed species habitat to promote recovery of the species") [emph. supplied]. Other than "standards for all vegetation types," which only assert statutory requirements of the NFMA regarding timber management (Draft Plan at 34), the draft plan proposes only five standards that are relevant to viability of threatened, endangered and/or sensitive species in the Coconino National Forest: * "FW-BioPhys-Geo-S: For caves that have been designated or nominated as 'significant,' manage to perpetuate those features, characteristics, values, or opportunities for which they were designated." Draft plan at 29. * "FW-Veg-Grass-SDG-S: Recreation goals are subordinate to antelope protection." Id. 45. * "FW-Veg-AT-S: Recreation activities, including new route construction, shall avoid important habitat for the San Francisco Peaks ragwort and result in minimal disturbance to its habitat." Id. 71. * "FW-WFP-S: Direction for species listed as threatened, endangered, proposed, or candidate takes precedence over direction for species not listed by the U.S. Fish and Wildlife Service." Id. 74. * "FW-Graz-S: Water developments shall incorporate escape devices to prevent animal entrapments." Id. 79. Notably, the draft plan does not propose any binding standards for management activities that may affect federally endangered, threatened or candidate species known to exist in the Coconino National Forest. None of the standards listed above will singularly or cumulatively ensure the conservation or recovery of species that are at-risk of extinction, as evidenced by listing under the federal Endangered Species Act ("ESA," 16 U.S.C. §§ 1531-1544), or guarantee viability of vertebrate species, as required by the NFMA. It would effectively repeal existing protections for at-risk plants and wildlife with no assurance of viability or recovery. Reliance on discretionary planning guidelines in lieu of binding standards is a controversial means of providing for species viability because only the Forest Service can interpret the "intent" of guidelines. The Forest Service is "entitled to deference to their interpretation of their own regulations, including Forest Plans." *Hapner v. Tidwell*, 621 F.3d 1239, 1251 (9th Cir. 2010) (internal quotation omitted). All proposed guidelines contain the discretionary word "should," not mandatory terms such as "will" or "shall." See *U.S. v. UPS Customhouse Brokerage, Inc.*, 575 F.3d 1376, 1382 (Fed. Cir. 2009) ("Will" is a mandatory term, not a discretionary one.); *New England Tank Indus. of N.H., Inc. v. United States*, 861 F.2d 685, 694 (Fed. Cir. 1988) (noting difference between mandatory term "will" and discretionary term "should"). The Ninth Circuit recognized that forest plan guidelines are not equivalent to mandatory standards, and held that forest plan language stating that old growth forest stands "should" be at least 25 acres in size was "a guide for planning purposes, but does not prohibit counting stands less than 25-acres as old growth." *Lands Council v. McNair* (537 F.3d 981 (9th Cir. 2010 en banc). More, in *Ecology Center v. Castaneda*, 574 F.3d 652, 660-61 (9th Cir. 2009), the Ninth Circuit held that the language of guidelines incorporated into a forest plan did not "create a mandatory standard." The guidelines were not enforceable under NFMA because they were cast in "suggestive" language using the word "should," and "merely recommended" a particular practice "when possible." Id. at 661 (internal quotation omitted). Forest Service reliance on aspiration statements of desired conditions and objectives, even coupled with semi-accountable guidelines, in lieu of enforceable standards that constrain project-level decisions and site-specific management, fails to meet NFMA requirements. See, e.g., *Citizens for Better Forestry v. U.S. Department of Agriculture*, 632 F.Supp.2d 980-81 (N.D.Cal., 2009). The draft plan will result in an actual physical effect on the environment. *Citizens for Better Forestry v. U.S. Dept. of Agriculture*, 341 F.3d 961, 973 (9th Cir. 2003). Reducing or repealing environmental standards in a forest plan will result in lesser or no environmental standards at the site-specific level. Id. at 975. The absence of enforceable standards in the draft plan affecting management of wildlife habitat contradicts NFMA and its planning regulations.⁶ See 16 U.S.C. §§ 1604(c) and (g); 36 C.F.R. §§§§ 219.1(b), 219.11(c), 219.12(f)(9)(iii) and 219.15 (1982).

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and

management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

Use of habitat as a proxy to ensure viability of sensitive species is permissible only when both the agency's "knowledge of what quality and quantity of habitat is necessary to support the species," and its "method for measuring the existing amount of that habitat" are reliable and accurate. Oregon Natural Resources Council Fund v. Goodman, 505 F.3d 884, 890 (9th Cir. 2007); see also Earth Island Inst. v. U.S. Forest Serv., 442 F.3d 1147, 1175-76 (9th Cir. 2006); Gifford Pinchot Task Force v. U.S. Fish and Wildlife Serv., 378 F.3d 1059, 1066 (9th Cir. 2004) ("The test for whether the habitat proxy is permissible ... is whether it reasonably ensures that the proxy results mirror reality."). The DEIS does not demonstrate that the draft plan will meet legal standards for a reliable and accurate habitat-proxy analysis of species viability. This shortcoming renders Forest Service conclusions about species viability arbitrary and capricious.

Response:

In evaluating species viability, a coarse filter/fine filter approach was used. Each evaluated species was associated with its primary habitat (the coarse filter) which could be an ERU or riparian area, and primary threats to the habitat were identified. An estimated was made as to the amount of occupied habitat as well as the amount of potentially suitable habitat for each species. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the revised plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. Management approaches were generally developed to address threats for which the Forest Service does not have complete jurisdiction. However, the coarse filter/fine filter approach does not assume that habitats are a proxy for viability, nor is the viability analysis process a habitat proxy. In addition, there is no National Forest Management Act (NFMA) requirement to spatially demonstrate adequate habitat for each species and the Vegetation Dynamics Development Tool (VDDT) modeling is not spatially explicit. The viability analysis grouped species by the ERUs or habitat element(s) they rely on for habitat. Other wildlife specialist reports assessed these species relative to requirements based on their status (e.g., federally listed, Southwestern Region sensitive sensitive, management indicator species, etc.). For example, federally listed species were also analyzed in accordance with Endangered Species Act requirements in the biological assessment. The analysis of species viability was conducted as directed in accordance with National Forest Management Act (36 CFR § 219.19) that defines a viable population as, "one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning areas." This species viability analysis is not population viability analysis which is the probability of a population persisting for a biologically meaningful timeframe and which often seeks to identify a minimum number of individuals for population persistence.

Commenter: Lininger, Jay

Comment:

Similarly, the Forest Service defines plan "objectives" in a way that does not carry any force or effect on decision-making in site-specific management actions.⁵ See Draft Plan at 5 ("Activities specified in objectives are intended to help make progress toward achieving desired conditions and represent just some of the outcomes or actions expected to accomplish movement 4 NFMA implementing regulations applicable to this plan revision define a "goal" as, "A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principal basis from which objectives are developed." 36 C.F.R. § 219.3 (1982). 5 The NFMA implementing regulations applicable to this plan revision define "objective" as, "A concise, time-specific statement of measurable planned results that respond to pre-established goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals." 36 C.F.R. § 219.3 (1982). toward desired conditions. Not every action or objective the Coconino NF may do is identified in the plan, just the primary ones").

Response:

The description of "objectives" in Chapter 1 of the Forest Plan has been adjusted to improve the understanding of this type of plan component. The description is consistent with the definition of an "objective" found in the National Forest Management Act implementing regulations. The description in Chapter 1 of the Forest Plan explains that objectives are not targets, but projections, and they may not be fully achieved based on a variety of factors. The objectives in the Forest Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives.

Commenter: Lininger, Jay

Comment:

One way the Forest Service can achieve better management of land resources is by allowing current grazing permit holders to voluntarily retire their allotments for conservation purposes. This will build flexibility into Forest management and allow for improved habitat and protection of understory seed banks in an uncertain climatic future.

Response:

Allowing permittees to permanently retire their allotments is outside the scope of the plan. The authority to permanently retire an allotment from grazing is retained by the Forest Service and is not held by the permittee.

Commenter: Lininger, Jay

Comment:

The revised forest plan must apply the species viability requirement as a starting point to develop mandatory protections for fish and wildlife populations on the national forest. To be useful and meaningful, the analysis of the environmental consequences of alternatives should explicitly apply the viability requirement, specify a minimum number of reproductive individuals for each species of planning concern, and demonstrate that the spatial distribution of habitat is adequate to maintain populations. Where the draft plan proposes a different management approach to species viability than the current Forest Plan (USDA 1987), as amended, the agency must provide a reasoned explanation for the change of course and compare impacts to the environment.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: Lininger, Jay

Comment:

As discussed previously, riparian and wetland areas should also be classified as unsuitable for grazing except in instances where valid existing water rights require access to these areas.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled “Determination of Lands Capable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Commenter: Lininger, Jay

Comment:

Sediment pollution is also currently a problem in many of the streams within the Coconino. According to the DEIS, the most important source of non-point pollution in the Forest is "sediment generated from roads near drainages." DEIS at 56. The DEIS also identifies the main contributing factor for nonpoint source pollution on the Coconino as "sediment generated from roads near drainages." Id. The Forest Service goes on to mention only one management strategy imposed to deal with this problem, which is "implementation of BMPs for all projects that have the potential to increase nonpoint pollution." Id. All other strategies cited deal with controlling point source pollution. Id.

Response:

The Plan contains many components that address sediment that may be associated with the management of roads and infrastructure. See FW-Rip-All-DC-1, FW-Rip-All-G-2, FW-Rip-Strm-DC-3, FW-Rip-Strm-G-2, and FW-RdsFac-G-2. In addition, Chapter 4 of the plan, under Recreation and Transportation Suitability, clarifies that the decisions associated with the Travel Management Rule, and subsequent updates, designate roads, trails, and areas suitable for motorized vehicle use. The analyses associated with the Travel Management Rule would also address issues associated with legacy roads and sedimentation into drainages.

Comment:

The Forest Service is required by NEPA to take a hard look at potentially significant impacts at direct, indirect and cumulative effects of the draft plan to grazing suitability. The methods used to determine suitability must be clearly described in a way that is understandable to the decision-maker and the general public.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled “Determination of Lands Capable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

Range capability in the Coconino National Forest significantly changed since the mid- 1980s, when grazing suitability assumptions on which the draft plan is based were developed. Prior estimates of range capability did not account for synergistic effects of livestock grazing and climate change on soil, water, vegetation and fire regime (Beschta et al. 2012). It is unlikely that range resources in the planning area ever will return to "historical norms" that supported forage production capacity over the past century: Despite ample uncertainties in model projections of hydroclimate change, and the continuation of natural climate variability on all timescales, it seems very probable that [South Western North America - "SWNA"] will be drier in the current century than in the one just past. Skillful prediction of the magnitude and timing of this drying will require prediction of the rate of anthropogenic change and prediction of the evolving natural variability for which currently there is scant evidence of any predictability beyond the interannual timescale. Another likely outcome is a continuing decline in winter snowpack and earlier onset of snow melt that will add to the stress on regional water resources. Seager and Vecchi (2010: 21282). Historically, "interglacial climates in the southwestern US can experience prolonged periods of aridity, lasting centuries to millennia, with profound effects on water availability and ecosystem composition. The risk of prolonged aridity is likely to be heightened by anthropogenic forcing" (Fawcett et al. 2011: 520). Williams and others (2012) noted that while average winter precipitation totals in the Southwest have not been exceptionally low in the recent past, average summer-fall evaporative demand since 2000 is the highest in the past 1,000 years. Forest drought stress over much of the past 13 years, including in 2011 and 2012, matched or exceeded the recorded "megadroughts" of the 13th and 16th centuries. The only other 13-year periods when similar conditions occurred with such frequencies in the past 1,000 years were during the megadroughts themselves. The strongest megadrought occurred during the second half of the 1200s and is believed to have played an important role in the abandonment of ancient Puebloan cultural centers throughout the Southwest. The observed trends in drought stress on forest conditions coincide with strong climate model agreement on anthropogenic greenhouse warming. Model projections indicate that megadrought-level stresses on water availability and vegetation production will be regularly exceeded by the mid-21st century, and even the wettest and coolest years of the late-21st century will be more severe than the driest, warmest years of the past millennium (Williams et al. 2012). The Forest Service does not account for this information, which has been repeatedly supplied to it through numerous public comments on allotment-specific management plans in the Coconino National Forest. See DEIS at 933-937 (grazing suitability determination does not take hard look at effects of climate change on forage productivity, but defers to a Terrestrial Ecosystem Survey presuming climate to be static, and largely mirrors the 1987 plan decision, plus or minus 6 percent of total forest acreage). Drought will continue to impact range capacity and utilization levels for the duration of the revised forest plan (Fawcett et al. 2011, Seager et al. 2007, Seager and Vecchi 2010), and it is likely to transform resource availability by stressing water supplies and net productivity, which in turn will produce novel environments (Williams et al. 2012). The Forest Service should disclose the foreseeable range of climate effects to range suitability, and candidly disclose past instances when livestock grazing has exceeded capability.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled "Determination of Lands Capable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This

revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

NFMA implementing regulations require the Forest Service to determine "the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species." 36 C.F.R. § 219.20 (1982). "The present and potential supply of forage for livestock, wild and free-roaming horses and burros, and the capability of these lands to produce suitable food and cover selected wildlife species shall be estimated." Id. § 219.20(a). Where the agency identifies lands that are "in less than satisfactory condition," it "shall" plan for their restoration. Id. The agency must consider, among other things, "possible conflict or beneficial interactions among livestock, wild free-roaming horses and burros and wild animal populations, and [...] direction for rehabilitation of ranges in unsatisfactory condition..." Id. § 219.20(b).

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled "Determination of Lands Capable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled "Determination of Lands Suitable for Livestock Grazing" in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Comment:

Regarding the last criterion above, logging and planting trees on sites impacted by wildland fire poses a different benefit-to-cost analysis from management of unburned forests. Long-term losses of soil productivity resulting from synergistic impacts of fire and mechanical disturbances (e.g., "salvage logging"), particularly where spread of exotic invasive species is a management concern, must be considered and analyzed in the timber suitability determination (Perry et al. 1989, Perry et al. 1995, McIver and Starr 2000, Beschta et al. 2004, Lindenmayer et al. 2004, Donato et al. 2006, Lindenmayer et al. 2008). Even with landscape-scale fuel management intended to reduce the probability and extent of high-severity fire effects to vegetation and soil, as proposed to varying degrees of intensity in all alternatives, severe fire effects on suitable timberlands are reasonably foreseeable (Swetnam and Betancourt 1998, Grassino-Mayer and Swetnam 2000, Gedalof et al. 2005, Running 2006, Westerling et al. 2006, Littell et al. 2009). Therefore, the Center proposes adding a caveat to the timber suitability designation in the revised forest plan stating that forest lands affected by severe fire effects to vegetation or soil will be managed for natural recovery rather than for economic production.

Response:

Adjustments have been made to the plan in response to this comment. A management approach has been added in the section for All Ecosystems: Following large or uncharacteristic disturbance events, focus management actions on human health and safety, long term restoration, soil and watershed stabilization, restoration or protection of ecosystem processes and resource values. In addition there is a monitoring question that relates to this topic: Have areas classified as unsuited for timber production become suitable? Another monitoring question: Have there been changes that have resulted in unforeseen issues requiring plan amendments? These questions capture the reverse situation in which lands classified as suited for timber production become unsuitable.

Comment:

In addition to determining suitability for timber production on portions of the national forest, the Forest Service also must review its prior classification of lands as unsuitable for timber production. See 16 U.S.C. § 1604(k); 36 C.F.R. § 219.14(b) (1982). It is not sufficient under NFMA to list the lands that previously were deemed unsuitable and carry forward that designation into a revised forest plan. Further analysis and comparison of alternatives is required. To inform analysis of timber suitability, we ask the Forest Service to consider and analyze the following criteria for designating lands as unsuitable for timber production: * High or severe soil erosion hazard identified by Terrestrial Ecosystem Survey. * Slopes steeper than 20 percent. * Lands within one site-potential tree height of perennial or intermittent streams or wetlands (e.g., generally 100-150 feet on either side of a stream bank in conifer forest vegetation types). * Contiguous areas larger than 1,000 acres without roads in all vegetation types. * Occupied and/or critical habitat of threatened or endangered species or candidate species proposed for listing. * Designated conservation areas for sensitive or management indicator species. * Occupied locations of endemic species with ranges limited to the national forest. * Lands impacted by high-severity fire effects to vegetation or soil.

Response:

The process for determining timber suitability is described in the Timber Suitability section in Chapter 4 of the Forest Plan and in the Timber Suitability Calculation section in Appendix G of the environmental impact statement and is conducted each time the Forest Plan is revised as required by law. The environmental impact statement and the Timber Suitability section in the Vegetation and Fire Specialist Report (Forest Service, 2015) demonstrate how the Coconino National Forest identified and described each Ecological Response Unit based primarily on the Terrestrial Ecosystem Survey (TES) which includes information on soils and erosion hazard. As described in the Timber Suitability section of the Vegetation and Fire Specialist Report, those lands that would suffer “Irreversible Resource Damage”, including those where with high erosion risk (particularly on steeper slopes), were excluded from the lands suitable for timber production. Similarly, lands where harvesting on steep slopes would cause irreversible resource damage, were also excluded from the lands suitable for timber production. Many lands that are steep, but could still be harvested using current techniques, were nevertheless excluded because they are not cost efficient; for the same reason, lands that lack roads or are too isolated were also excluded. Areas identified as water or as having riparian soils are not designated as lands suitable for timber production. The Forest Plan also provides guidance for all management activities, including timber harvest, which limits damage to all riparian areas (FW-Rip-All-G-1, -2, -3, and Management Approaches; FW-Rip-Strm-G-1, -2, and Management Approaches). These guidelines and management approaches provide for aquatic management zones designed to minimize detrimental changes to streams and riparian areas within each project. Excluding areas from lands suitable for timber production that would be associated with candidate species proposed for listing would be too speculative and premature at the time of this analysis. However, areas of critical habitat for endangered and threatened species, such as the Mexican Spotted Owl, are excluded from lands suitable for timber production under the category of lands with management prescriptions that preclude timber production. There are not specially designated “conservation areas” for sensitive or management indicator species (MIS) unless the species is also designated as endangered or threatened, in which case, the lands would be excluded based on management prescriptions limitations. During the analysis process for each project conducted under this Forest Plan, the Forest evaluates the effects of proposed actions on sensitive species and endemic species with ranges limited to the national forest. Actions that may negatively affect the habitat of these species are evaluated and mitigated, as appropriate. The Plan also provides a number of guidelines and management approaches that are specifically geared towards protecting and enhancing the habitat for threatened, endangered, and sensitive species and endemic species within limited ranges. Additional details regarding viability are included in other responses. Areas that have been impacted by high-severity fire may be excluded from the lands suitable for timber production if monitoring has determined that the long term losses in soil productivity are such that the areas is incapable of producing industrial wood. Small changes or short term changes in soil productivity, much less changes that are strictly limited to surface vegetation, do not in and of themselves make the land unsuitable for timber production. Areas that are incapable of producing industrial wood are identified during Forest Plan revision as part of the timber suitability determination process. The purpose of identifying lands that are suitable for timber production is

solely to calculate the long term sustained yield and allowable sale quantity of the Forest. Those lands identified a suitable for timber production are capable of being managed for growing, tending, harvesting, and regenerating crops of trees on a regulated basis. In general, excluding lands from timber production does not provide any protections or prevent any particular land management activity. Lands categorized as unsuitable may still be managed through timber harvests, which is one of a suite of vegetation management tools. The concerns expressed in the comment are actually addressed through the relevant guidelines and management approaches described in the Forest Plan.

Commenter: Lininger, Jay

Comment:

Only suitability determinations, standards and guidelines actually constrain project-level decisions. See id. 5-6; 9 ("Projects are expected to comply with suitability, standards, and guidelines contained in the plan"); also see DEIS at 5 ("Suitability determinations, standards, and guidelines set requirements to limit or guide forest uses or activities that are expected to occur under the forest plan"). However, there is a significant distinction between those plan components. A standard is an "absolute requirement" to be met in the design of projects and activities, whereas a guideline is a "sideboard" from which deviation "is permitted without a plan amendment, as long as the intent of a guideline is met." Draft Plan at 5-6. The Forest Service clearly anticipates in the Draft Plan instances when project-level decisions will deviate from proposed guidelines without a plan amendment.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: Lininger, Jay

Comment:

The revised forest plan should also include prohibitions on other activities within riparian areas. This includes a prohibition on logging, road-building, mining, and pesticide application within a designated buffer zone. Additionally, management practices within riparian areas should only be undertaken if it can be shown that they will restore or protect riparian ecosystem functions or species viability. The plan should be revised to incorporate prohibitions or specific management strategies for all proposed activities within the guidance set forth for those specific activities. These changes are necessary to respond both to current degradation and the potential amplified negative impact from climate change if riparian areas are not restored.

Response:

Riparian areas are protected by Plan direction. The Plan does not apply an all-purpose buffer or restriction on particular activities. Rather, Plan direction ensures that impacts to riparian areas, despite their exact proximity to a riparian area or the cause of the impact, are addressed in project-level decisions. See FW-Rip-All-G-1, 2, 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Sprg-G-1, 3, and 4, and FW-Graz-G-4,5, and 7.

Commenter: Lininger, Jay

Comment:

In the Draft Plan, the following is stated as a desired condition for Roads and Facilities within the forest: "Temporary roads that support ecosystem restoration activities, fuels management, or other short-term projects are rehabilitated promptly after project completion. Unneeded roads are closed or naturalized to reduce human disturbance to wildlife and to reduce soil erosion. Some closed roads are converted to motorized trails or nonmotorized trails for recreational use." Draft Plan at 91-92. We recommend changing the final sentence of this desired condition to "Some closed roads are converted to nonmotorized trails for recreational use when such use conforms with habitat and species recovery plans, will not result in degradation of natural resources, and replaces other planned new trail development within the forest." Moreover, all of these conditions should be changed to be standards or guidelines, as their language and prescriptions are better suited for project-level guidance as opposed to general goals.

Response:

The Forest Plan has been adjusted in response to this comment. The portion of this component that addressed converting closed roads to trails has been converted into a guideline in the Trails section. See FW-Rec-Trails-G-5. The guideline incorporates the suggestion to consider impacts to other resources when considering whether to convert a closed road to a trail. The guideline does not require the trail to be nonmotorized. That decision would be made at the project level based on site-specific information.

Comment:

Under the National Forest Management Act ("NFMA," 16 U.S.C. §§ 1600-1687), forest management plans must assure suitability of lands where timber production is allowed. See 16 U.S.C. § 1604(e). Timber suitability determinations "shall ... be embodied in appropriate written material, including maps and other descriptive documents, reflecting proposed and possible actions, including the planned timber sale program and the proportion of probable methods of timber harvest within the unit necessary to fulfill the plan." Id. § 1604(f)(2). Forest Service responsibility to plan for multiple uses necessarily means that not all lands are available for all purposes. See id. § 1604(g)(3)(E) (Forest Service must ensure that timber will be harvested from national forest lands only where, for example, "(i) soil, slope, or other watershed conditions will not be irreversibly damaged..."); also see *Southeast Conference v. Vilsack*, 08- 1598 (D. D.C., Feb. 17, 2010). In developing forest plans, the Forest Service: shall identify lands within the management area which are not suited for timber production, considering physical, economic, and other pertinent factors to the extent feasible, as determined by the Secretary, and shall assure that, except for salvage sales or sales necessitated to protect other multiple-use values, no timber harvesting shall occur on such lands for a period of 10 years. Lands once identified as unsuitable for timber production shall continue to be treated for reforestation purposes, particularly with regard to the protection of other multiple- use values. The Secretary shall review his decision to classify these lands as not suited for timber production at least every 10 years and shall return these lands to timber production whenever he determines that conditions have changed so that they have become suitable for timber production. Id. at 1604(k). Furthermore, the applicable regulations state that timber suitability designations in forest plans must apply cost-benefit analysis and "stratify" lands by allowable intensity of timber management: For the purpose of analysis, the planning area shall be stratified into categories of land with similar management costs and returns. The stratification should consider appropriate factors that influence the costs and returns such as physical and biological conditions of the site and transportation requirements. This National Forest System Land Management Planning Environmental Impact Statement analysis shall identify the management intensity for timber production for each category of land which results in the largest excess of discounted benefits less discounted costs and shall compare the direct costs of growing and harvesting trees, including capital expenditures required for timber production, to the anticipated receipts to the government, in accordance with Sec. 219.12 and paragraphs (b)(1) through (b)(3) of this section.

Response:

Timber suitability classification was conducted in compliance with the provisions of the 1982 Planning Rule and Southwestern Region planning direction (Forest Service, 2009). The 1982 Planning Rule includes the regulations developed to implement the National Forest Management Act. The Coconino NF suitability determination is based on land availability, capability, operability, management area objectives and requirements, and the economic feasibility of the land. See the Timber Suitability Calculation section in Appendix G of the environmental impact statement and the Timber Suitability section in the Vegetation and Fire Specialist Report (Forest Service, 2015). Also see the Timber Suitability section in Chapter 4 of the Forest Plan.

Commenter: Lininger, Jay

Comment:

Moreover, even though the DEIS discusses these threats within the Draft Plan and DEIS, the main risk factor identified by the Forest Service for Riparian Forest PVNTs within the Coconino is "uncharacteristic fire." Id. at 309. While fire does have the potential to remove vegetation and increase negative effects associated with flooding and sedimentation into riparian areas, it is misleading to classify this as the "main risk factor," thereby downplaying the significant and negative effects on water quality and riparian function from human-caused and permitted activities.

Response:

Riparian areas are protected by Plan direction. The Plan does not apply an all-purpose buffer or restriction on particular activities. Rather, Plan direction ensures that impacts to riparian areas, despite their exact proximity to a riparian area or the cause of the impact, are addressed in project-level decisions. See FW-Rip-All-G-1, 2, 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Sprg-G-1, 3, and 4, and FW-Graz-G-4,5, and 7.

Commenter: Lininger, Jay

Comment:

Finally, if the Final Plan includes only the desired conditions, objectives, standards, and guidelines presented in the Draft Plan for grazing, off-road vehicle use, and road maintenance, which are inadequate to address historical and continuing use and misuse, it is more than likely that riparian areas will become more degraded, not less, over the time this plan is implemented.[...] The current condition of riparian areas in the Coconino highlights the problems with past management and the need for increased protection for these areas within the Final Plan. Twenty- three percent of riparian areas are "functioning at-risk" and six percent are "nonfunctional." DEIS at 67. In its discussion of the Affected Environment for Riparian Forests, the DEIS states that "legacy of improperly located and poorly maintained roads (especially user-created roads)", "dispersed recreation", "legacy off-highway vehicle use", and "legacy grazing" are the threats faced by every impaired or at-risk watershed within the Coconino. DEIS at 68. However, none of these threats is adequately addressed or mitigated within the Draft Plan.

Response:

Riparian areas are protected by Plan direction. The Plan does not apply an all-purpose buffer or restriction on particular activities. Rather, Plan direction ensures that impacts to riparian areas, despite their exact proximity to a riparian area or the cause of the impact, are addressed in project-level decisions. See FW-Rip-All-G-1, 2, 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Sprg-G-1, 3, and 4, and FW-Graz-G-4,5, and 7.

Commenter: Lininger, Jay

Comment:

Second, this is troubling because the current state of riparian ecosystems on the Coconino is impaired and degraded, and if the Draft Plan will result in the same state as is currently found under management from the Current Plan (Alternative A), there is little hope that fish and wildlife species will be able to recover.

Response:

The Forest Plan includes direction that will guide livestock grazing to meet or move towards desired conditions, including desired conditions for riparian areas. See FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1. Similar direction can be found in other sections of the Forest Plan that address human activities, such as recreation, special uses, roads and facilities. See FW-Rec-All-DC-6, FW-Rec-All-G-1 and 2, FW-SpecUse-G-1, and FW-RdsFac-DC-1, and FW-RdsFac-G-1 and 2. Plan direction for riparian areas, which include stream ecosystems, wetlands, springs, and riparian forest types, is included in the Riparian Areas section. While there are no standards for management of riparian areas, the plan direction in the Riparian Areas section provides comprehensive direction for these areas. Soil and water guidelines would implement and monitor best management practices for all activities with the potential to impair water quality, to control and manage nonpoint source pollution and to maintain water quality, quantity, and timing of flows, and to prevent or reduce accelerated erosion. See FW-Soil-G-1 and FW-Water-G-4. Buffers, called aquatic management zones, would be identified and maintained in riparian areas to avoid detrimental changes that would seriously and adversely affect water conditions, fish habitat or connected downstream cave, karst, and lava tube resources. See FW-Rip-All-G-3. Aquatic management zones would also be established in non-riparian, intermittent streamcourses to maintain channel functioning, downstream water quality, riparian habitat, and function. See FW-Rip-Strm-G-2. Some of the desired conditions and guidelines that promote resiliency, hydrologic and biotic integrity, natural processes, base flow, riparian communities, groundwater recharge, and species diversity include FW-Water-DC-1, 2, 3, 5, 6, and 7; FW-Water-G-3 and 6; FW-Rip-All-DC-1, 2 and 5, FW-Rip-Strm-DC-1, 2, 3, and 4 and FW-Rip-Strm-G-1, FW-Rip-WtInds-DC-1 and 2, FW-Rip-Spr-DC-1 through 5, and FW-Rip-Spr-G-1, 3, and 4, FW-Rip-RipType-DC-1, 2, 4, 5, 6, and FW-Rip-RipType-G-1, 3, and 4, FW-WFP-DC-3, 4, and 5, FW-Invas-DC-1 and 2, FW-Invas-G-1 and 2, FW-Graz-G-4, 5, and 7, FW-RdsFac-G-5 and 9, FW-Rec-All-G-2, and FW-Rec-Disp-G-5. Connectivity along streams, across floodplains and valley bottoms, between surface and subsurface flows, and between vegetative communities is supported by desired conditions in Watersheds and Water, All Riparian Areas, Riparian Forest Types, and Wildlife, Fish and Plants. See FW-Water-DC-4, FW-Rip-All-DC-3 and G-2, FW-Rip-RipType-G-2, and FW-WFP-DC-6.

Commenter: Lininger, Jay

Comment:

The most troubling component of the Forest Service's analysis of the impact of management decision on water resources within the Coconino National Forest is the statement that "the amount of human and livestock disturbances in riparian areas would be similar among all alternatives and would probably equally impact riparian function." DEIS at 61. First, this points to the inadequacy of the alternatives analysis, which requires development of alternatives that "[r]igorously explore and objectively evaluate all reasonable alternatives." 40 CFR § 1502.14.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Comment:

Forests are essential to clean water, and the Forest Service has a responsibility to protect water resources within National Forests. NFMA also specifically requires that forest plans make special provision for the ecological integrity and function of riparian areas. 36 C.F.R. § 219.27(e) (1982). However, the Draft Plan does not provide adequate provisions or protections for riparian areas, nor does any other proposed alternative. This is made clear in Table 60, located on page 312 of the DEIS, which estimates likely trends toward desired conditions for all riparian areas under all alternatives. This table clearly shows that under all alternatives, there is departure from reference conditions, and either "no change" is expected under proposed management or the alternatives would "slowly" lead to improvement in all riparian vegetation communities. DEIS at 311-312. The requirement that the Forest Service make special provision for riparian areas is especially important in the Coconino. "Riparian areas make up less than 1 percent of the forest, yet are one of the most biologically diverse ecosystems." Draft Plan at 22. Unfortunately, many of the species that rely on these water-based ecosystems face an uncertain future. Ninety-three percent of the native fish species present in the forest are federally-listed or sensitive. Id. All of the native leopard frogs in the forest are either listed or sensitive species, and two of the four most imperiled species on Southwestern Forest Service lands, the Little Colorado spinedace and spikedace fish species, are located within streams on the Coconino. Id. All of these species are dependent on water within the Coconino and can be profoundly affected by changes in water quality.

Response:

The Forest Plan has numerous desired conditions that relate to the ecological integrity and function of riparian areas, stream banks, flow regimes, and other features of aquatic habitat. See FW-Eco-DC-3; FW-Water-DC-1-7, FW-Rip-All-DC-1-5; FW-Rip-Strm-DC-1-4; FW-Rip-WtInds-DC-1, 2; FW-Rip-Spr-DC-1-5; FW-Rip-RipType-DC-1-6; FW-WFP-DC-4, 5, 6 Guidelines that specifically apply to functioning aquatic and riparian ecosystems include: FW-Water-G-1-6; FW-Rip-All-G-2; FW-Rip-Strm-G-1; FW-Rip-Spr-G-1-4, FW-Rip-RipType-G-1, FW-WFP-G-3, and FW-RdsFac-G-5 and 9. In addition there are objectives in the plan to restore wetlands, springs, non functioning and function-at-risk riparian areas, and stream habitat. See FW-Rip-WtInds-O-1; FW-Rip-Spr-O-1, FW-Rip-All-O-1, and FW-WFP-O-4. In regards to areas near the edge of perennial water, an aquatic management zone is required to protect water quality and to avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits that would seriously and adversely affect water conditions, fish habitat, or connected downstream cave, karst, and lava tube resources. As a general starting point, the zone width in riparian areas ranges from 100 to 150 feet on each side of the streamcourse or riparian area depending on erosion hazard (See FW-RipAll-G-3). A management approach for All Riparian Areas recommends project level analysis to determine whether the zone should be wider or narrower. It reads: Consider Table 1 as a general starting point for determining the width of the aquatic management zone relative to erosion hazard. Aquatic management zones may be wider or narrow than suggested in Table 1 and would be decided at the project level. Considerations for the size and shape of an aquatic management zone include amount and type of material on the ground, width and slope of the zone, soil type or hydrologic soil group, orientation of stream or river to the sun, connection of stream to impaired or non-attaining waters, presence of threatened or endangered species, condition of the riparian area, adjacent land use, and threat of contamination from pollutants or chemicals. Significant topographic changes, such as abrupt canyon edges may be used as boundaries for aquatic management zones, as long as activities beyond the canyon walls do not negatively influence the functioning of the aquatic management zone. Because non-riparian streamcourses could also negatively affect perennial waters, an aquatic management zone is also required for non-riparian, intermittent streamcourses to reduce sedimentation, maintain functioning of the channel within its floodplain, and maintain downstream water quality and riparian habitat and function. This management zone would also avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits that would seriously and adversely affect water conditions, fish habitat, or connected downstream cave, karst, and lava tube resources. See FW-Rip-Strm-G-2. Stream Ecosystems has a management approach similar to the one in All Riparian Areas but in addition, it mentions consideration of ephemeral streamcourses that might influence downstream water quality. In addition, a site-specific aquatic management zone would be required for new projects and management activities around reservoirs to protect water quality and to avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits

that would seriously and adversely affect water conditions or aquatic habitat. See FW-ConstWat-G-1. Also, desired conditions in Wildlife, Fish and Plants support properly functioning ecosystems which in turn support sustainable populations of native plant and animal species distributed throughout their potential natural range, and the recovery of listed species, and these conditions maintain species diversity and metapopulations. See FW-WFP-DC-1 and 2.

Draft

Comment:

Furthermore, as vegetation communities change in composition and shift in space over the life of the revised forest plan (Allan and Sodden 2008, Grassino-Mayer and Swetnam 2000, Jones et al. 2009, Millar et al. 2007, Seager and Vecchi 2010, Skinner 2007, van Mantgem and Stephenson 2007, Williams et al. 2012), plant community succession and individual plant growth dynamics also will change. This fact presents a significant challenge for adaptive management because detection of change and adaptation requires robust monitoring systems. The complete monitoring plan, including study design and analysis protocols, should be made available for public review and comment before a decision is made to revise the forest plan. The Center has specific questions about the monitoring plan, including but not limited to: (1) criteria for selection of measurable indicators of change; (2) sampling design power analysis and expected observational error rates; (3) sampling procedures including monitoring cycle; (4) confidence levels to be applied in data analysis and reporting; (5) timeframe for evaluation of results; (6) triggers for management adaptation using new information; and (7) funding sources. Reliance on statements of desired conditions for the PNV types as a proxy for species viability, and the agency's ability to realize those desired conditions, is subject to significant uncertainty.

Response:

The monitoring plan is Chapter 5 in the forest plan. It was sent out for public comment in December 2013. It has been modified in response to public comments. The purpose of the monitoring plan is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the Forest Plan. The monitoring and evaluation report is intended to inform adaptive management of the plan area especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions: What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The Forest Plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. All of the monitoring and evaluation timeframes identified in this chapter begin from the date of the record of decision. The monitoring plan includes the following: Monitoring Question: The question(s) that will be answered. All questions are at the geographic scale of the forest unless indicated otherwise. Metrics and Data Sources: The evaluation criteria and data sources available to evaluate the monitoring questions at the time of plan approval. These are not the required methods of measurement. As new tools become available, other methods may be used to answer the monitoring questions. Frequency of Monitoring: How often information is gathered or measured. Most items are monitored annually. One item is monitored every 10 years. That item asks "Have areas classified as unsuited for timber production become suitable?" Frequency of Evaluation: How often the information is analyzed and reported. Available monitoring information will be evaluated and reported every two years. Data Precision and Reliability: An indication of how rigorous the information used to evaluate the monitoring question is with respect to repeatability, reliability, accuracy, and precision. Two categories of precision and reliability are appropriate at the plan scale, and because of varying methods and data sources used to evaluate the monitoring question, both classes may be indicated. Classes of precision and reliability, however, are not meant to identify which methods and data sources may be most appropriate to answer the monitoring question. Class A: Methods that are generally well accepted for modeling or quantitative measurement. Results have a high degree of repeatability, reliability, accuracy, and precision. Class B: Methods or measurements that are based on project records, personal communications, ocular estimates, pace transects, informal visitor surveys, and similar types of assessments. The degree of repeatability, reliability, accuracy, and precision are not as high as Class A methods, but they still provide valuable information. Monitoring and evaluation are identified, approved, and scheduled through the annual budget process. Actual budget levels,

funding emphasis, and emergence of new issues may affect accomplishment of both management activities that make progress toward desired conditions as well as monitoring. Partnerships may be developed to accomplish monitoring and evaluation.

Commenter: Lininger, Jay

Comment:

In addition to adding substantive limitation and prohibitions for activities within the Forest, the Forest Service needs to address the reasons it has abandoned specific standards and guidelines for riparian areas that are found in the current management plan. The following specific standards and guidelines are present in the current plan, but are not incorporated into the Draft Plan or any proposed alternative: * Manage riparian areas to protect the productivity and diversity of riparian-dependent resources by requiring actions within or affecting riparian areas to protect and, where applicable, improve dependent resources. Emphasize protection of soil, water, vegetation, and wildlife and fish resources prior to implementing projects. * Give preferential consideration to resources dependant on riparian areas over other resources. Other resource uses and activities may occur to the extent that they support or do not adversely affect riparian-dependent resources. The Forest Service provides no explanation in the DEIS why it proposes to abandon the standards and guidelines listed above. The Forest Service must explain why it is changing course by deleting or weakening standards and guidelines, and assess how those changes will impact the environment. Riparian areas present a significant issue for analysis because the Forest Service is required by NFMA to ensure viability of species that depend on riparian habitats, many of which are listed under the ESA. The Center recommends incorporation of the standards and guidelines listed above in any plan the Forest Service adopts. `

Response:

Plan direction related to riparian areas, water, watersheds and riparian dependent and aquatic species are found in a variety of places in the Forest Plan. While there are no plan standards, there are desired conditions and guidelines in numerous places that are intended to maintain or improve riparian and aquatic habitats, and plan objectives in Wetlands, Springs, Wildlife, Fish and Plants that would improve to riparian areas and streams. See FW-Rip-WtInds-O-1, FW-Rip-Spr-O-1, and FW-WFP-O-4. In addition, Appendix D identifies some of the law, regulations, and policy that apply to watersheds, water, and riparian areas that are not duplicated in plan direction. Plan direction for riparian areas, which include stream ecosystems, wetlands, springs, and riparian forest types, is included in the Riparian Areas section. While there are no standards for management of riparian areas, the plan direction in the Riparian Areas section provides comprehensive direction for these areas. Soil and water guidelines would implement and monitor best management practices for all activities with the potential to impair water quality... to control and manage nonpoint source pollution and to maintain water quality, quantity, and timing of flows, and to prevent or reduce accelerated erosion. See FW-Soil-G-1 and FW-Water-G-4. Buffers, called aquatic management zones, would be identified and maintained in riparian areas to avoid detrimental changes that would seriously and adversely affect water conditions, fish habitat or connected downstream cave, karst, and lava tube resources. See FW-Rip-All-G-3. Aquatic management zones would also be established in non-riparian, intermittent streamcourses to maintain channel functioning, downstream water quality, riparian habitat, and function. See FW-Rip-Strm-G-2. Some of the desired conditions and guidelines that promote resiliency, hydrologic and biotic integrity, natural processes, base flow, riparian communities, groundwater recharge, and species diversity include FW-Water-DC-1, 2, 3, 5, 6, and 7; FW-Water-G-3 and 6; FW-Rip-All-DC-1, 2 and 5, FW-Rip-Strm-DC-1, 2, 3, and 4 and FW-Rip-Strm-G-1, FW-Rip-WtInds-DC-1 and 2, FW-Rip-Spr-DC-1 through 5, and FW-Rip-Spr-G-1, 3, and 4, FW-Rip-RipType-DC-1, 2, 4, 5, 6, and FW-Rip-RipType-G-1, 3, and 4, FW-WFP-DC-3, 4, and 5, FW-Invas-DC-1 and 2, FW-Invas-G-1 and 2, FW-Graz-G-4, 5, and 7, FW-RdsFac-G-5 and 9, FW-Rec-All-G-2, and FW-Rec-Disp-G-5. Connectivity along streams, across floodplains and valley bottoms, between surface and subsurface flows, and between vegetative communities is supported by desired conditions in Watersheds and Water, All Riparian Areas, Riparian Forest Types, and Wildlife, Fish and Plants. See FW-Water-DC-4, FW-Rip-All-DC-3 and G-2, FW-Rip-RipType-G-2, and FW-WFP-DC-6. The standards and guidelines referred to in comment 84-40 do not occur in the Coconino National Forest 1987 plan.

Commenter: Lininger, Jay

Comment:

Moreover, the Center strongly urges the Forest Service to include measureable and enforceable standards and guidelines for activities within riparian areas. Livestock grazing is currently permitted on most of the Coconino National Forest. The Forest has acknowledged historic overgrazing has damaged riparian areas. However, the Forest Service has not disclosed how this has impacted recovery of listed species. Additionally, while the Draft Plan limits grazing in riparian areas to only when it would cause "no significant deleterious effects to riparian structure or function," the Forest Service has acknowledged that a key contributing factor to riparian degradation is lack of enforcement capability. Due to the generalized and highly discretionary nature of the proposed guideline, the Center recommends that the guideline be replaced by a more enforceable and resource protective requirement. Specifically, the Draft Plan should establish a buffer zone of at least 150 feet around riparian areas where grazing would not be permitted. The inclusion of this proscriptive requirement is supported by data showing that livestock grazing is a principal factor in stream bank erosion, increase in sediment pollution and turbidity, and loss of insect-supporting vegetation (Armour et al. 1990).

Response:

The Plan includes direction (FW-Graz-DC-2, FW-Graz-G-2, and FW-Rip-All-G-1) that will guide livestock grazing to meet or move towards desired conditions. Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1), the filtering of runoff (FW-Rip-Strm-DC-3), the reduction of damage from floods (FW-Rip-Strm-DC-1), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move towards these desired conditions will be determined and monitored at the project level based on site specific information. In addition, projects and activities in perennial and intermittent streamcourses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2, FW-Soil-G-2, 3, FW-Rip-All-G-2, FW-Rip-RipType-DC-3,4, and FW-Rip-RipType-G-3).

Commenter: Lininger, Jay

Comment:

The Forest Service should analyze and disclose in the EIS what it knows about the existing condition of riparian ecosystems and associated aquatic species on national forest lands, particularly at-risk fish and amphibians, as well as their food resources. The Forest Service must take a hard look at the success or failure of the existing Forest Plan and so-called "best management practices" at meeting statutory and regulatory requirements to provide for fish and wildlife. The Draft Plan and DEIS mention several threats to riparian ecosystems, such as livestock grazing, historical pollution from mining activities, degradation from human motorized recreation, and water quantity shifts associated with climate change. All of these historical and current stressors can affect key ecosystem components and processes leading to arrest of ecological recovery (Steedman and Regier 1987). They may also cause reduced efficiency of nutrient cycling, changes in productivity, reduced species diversity, changes in the size distribution and life-history traits of certain fauna, increased incidence of disease, and increased population fluctuations with increasing levels of stress (Woodwell 1970, Odum 1985, Rapport et al. 1985, Moyle and Leidy 1992). Climate change also has the potential to reduce water availability and habitat suitability for aquatic organisms (Seager et al. 2007). However, the Service provides no additional data as to the effect of these ecosystem stressors on current population levels and habitats of listed species and at-risk ecosystems. The Forest Service must disclose in the DEIS the current state of riparian and aquatic species habitat and viability and how they have been impacted by the above mentioned stressors.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Lininger, Jay

Comment:

The Forest Service provides no explanation why it now proposes to abandon standards and guidelines in the current Forest Plan (USDA 1987) for management of riparian habitats. It is not revising this plan on a blank slate, but rather it is significantly weakening the existing plan, which has been in effect for many years. "[A]n agency changing its course must supply a reasoned analysis." *Motor Vehicles Manufacturers Assoc. v. State Farm*, 463 U.S. 29, 57 (1983). The Forest Service must consider the effect of the existing Forest Plan on NFMA mandates (e.g., riparian areas), explain why it is changing course by deleting or weakening standards and guidelines, and assess how those changes will impact the environment. Riparian areas present a significant issue for analysis because they are severely degraded on the Coconino National Forest, and the viability of species that depend on aquatic habitat hangs in the balance.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

An ecosystem approach is warranted to stop riparian habitat degradation, maintain aquatic ecosystems that are currently in good condition, and to aid recovery of at-risk species. Federal land management cannot arrest all sources of population declines or degradation of aquatic habitats, such as artificial stocking and non-native species invasions, but the Forest Service can implement standards and guidelines to maintain and restore aquatic ecosystems and riparian habitats on national forest lands. This approach is both prudent and necessary given the current perilous state of many native fish, amphibian and reptile populations. Spatial and temporal connectivity within and between watersheds is necessary for maintaining aquatic and riparian ecosystem functions (Naiman et al. 1992). A large river basin can be visualized as a mosaic of a terrestrial "patches" (Pickett and White 1985) or smaller watersheds linked by stream, riparian and sub-surface networks (Stanford and Ward 1992). Lateral, vertical and drainage network linkages are critical to aquatic system function. Important connections within basins include linkages among headwater tributaries and downstream channels as paths for water, sediment and disturbances; and linkages among floodplains, surface water and ground water systems (hyporheic zones) as exchange areas for water, sediment and nutrients. Unobstructed physical and chemical paths to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species must also be maintained. Connections among basins must allow for movement between refugia (USDA 1993). These natural processes and ecosystem-level interactions cannot be maintained by focusing on specific habitat. In fact, one of the main reasons for lack of progress in delisting aquatic species is the historical approach of focusing on habitat instead of complete ecosystems (Williams et al. 1989). Key physical components of a fully functioning aquatic ecosystem include complex habitats consisting of floodplains, banks, channel structure (i.e., pools and riffles), water column and sub-surface waters. These are created and maintained by rocks, sediment, large wood and favorable conditions of water quantity and quality. Upslope and riparian areas influence aquatic systems by supplying sediment, large wood and water. Disturbance processes such as floods are important delivery mechanisms. Over time scales of one-to-1000 years, streams are clearly disturbance-dependent systems (Pringle et al. 1988). To maintain native communities of organisms throughout a large drainage basin, it is necessary to maintain features of the natural disturbance regime (i.e., frequency, duration and magnitude) in different portions of a basin. Aquatic ecosystems consist of a diversity of species, populations and communities that may be uniquely adapted to these specific structures and processes (USDA 1993). The Center reiterates its prior proposal of an ecosystem-scale aquatic conservation strategy ("ACS") as an action alternative in the revised forest plan. The Forest Service adopted such an ecosystem approach to management of aquatic habitat and at-risk fisheries in a Record of Decision for federal lands within the range of northern spotted owl in the Pacific Northwest. It designates "key watersheds" in large drainage basins that offer the highest quality aquatic habitat to support recovery of fish populations. Fishes are reasonable indicator species for the health and function of aquatic systems. Key watersheds tend to host large areas of upland terrestrial habitat without roads where aquatic organisms enjoy the greatest likelihood of persistence. Key watersheds are withdrawn from programmed timber harvest and increases of road density are prohibited. The ACS further designates "riparian reserves" as a discrete land allocation within specified distances from streams or wetlands where the management must maintain or restore aquatic habitat. Standards and guidelines for active management of riparian reserves require proposed action to meet or "not prevent attainment" of discrete "ACS objectives" related to physical, chemical and biological properties of aquatic ecosystems (USDA 1993). In addition to establishing management areas, or land allocations, the ACS compels the Forest Service to undertake watershed analysis at the scale of large drainage basins (~50,000 acres) to account for critical factors affecting aquatic habitats including road density, vegetation cover and geologic stability, among others. Active forest management in key watersheds and riparian reserves, as well as site-specific designation of riparian reserves, is preceded and informed by watershed analysis (USDA 1993). Moreover, the ACS calls for restoration of aquatic ecosystems where past management activities have degraded indicators of ecological function, as expressed by the ACS objectives. Examples include road density reduction, removal of in-stream structures and cessation or regulation of livestock grazing in floodplains and wetlands, as well as a prohibition on use of mitigation or planned restoration in site-specific project activities as a substitute for preventing degradation of existing high-quality aquatic habitat (USDA 1993). The Center again recommends that the Forest Service adopt an ecosystem approach to management of aquatic habitats in this forest plan revision. It is clear that existing standards and guidelines and best management practices, even if fully funded, implemented and monitored, are inadequate to meet statutory and regulatory requirements to provide for viable fish and wildlife populations that depend on aquatic

habitats. Clearly, more protective standards and guidelines that constrain management are required. Carrying forward or modifying existing standards and guidelines to make them more protective of aquatic ecosystems would help the Forest Service meet statutory and regulatory requirements under NFMA. In scoping comments dated December 10, 2010, the Center proposed a strategy to maintain and restore riparian areas and aquatic habitats, which the Forest Service appears to have ignored. The Center noted that the Forest Service amended land management plans in the Pacific Northwest Region within the range of northern spotted owl to enact an ACS that:

- * Designates key watersheds in large drainage basins that offer the highest quality aquatic habitat, which host large areas of upland terrestrial habitat without roads, where recovery of at-risk aquatic organisms has the greatest likelihood of success. Key watersheds are withdrawn from programmed timber harvest and increases of road density are prohibited.
- * Establishes riparian reserves as discrete land management areas parallel to streams, in proximity to wetlands, and on high-risk landslide terrain where the emphasis is to maintain and restore aquatic habitat.
- * Enacts standards and guidelines for management in riparian reserves that require project-level actions to meet discrete objectives related to physical, chemical and biological aspects of aquatic ecosystems. Suggested plan standard: "Management actions in riparian reserve that do not meet the ACS objectives, or prevent their attainment, shall not be implemented."
- * Requires watershed analysis at the scale of large drainage basins to account for road density, vegetation cover and ecological processes that contribute to aquatic habitat quality. Land management in key watersheds and riparian reserves must be preceded and informed by watershed analysis.
- * Compels active restoration of aquatic ecosystems in compliance with standards and guidelines for riparian reserves. Examples of restoration activities include road density reduction, removal of developments and grazing from floodplains and wetlands.
- * Prohibits use of site-specific mitigation measures or planned restoration activities as a substitute for preventing degradation of existing high-quality aquatic habitat.

The Center reiterates its advocacy of the ACS described above, and urges the Forest Service to consider it as part of the range of alternatives in the EIS for this plan revision and implement it regardless of the alternative chosen by the decision-maker. It is the only proposal that meets NFMA requirements for management of riparian areas and maintenance of species viability, and is consistent with the need for change (Revision Topic 1).

Response:

The Forest Plan recognizes the need to maintain, improve, and restore watersheds, riparian areas, and aquatic habitat and their associated species on the Coconino NF. The primary approaches of the plan to address these issues are through ecosystem restoration of the various Ecological Response Units across the landscape, addressing degraded watershed conditions, and improving conditions within riparian areas and their associated aquatic habitats and species. Numerous objectives, desired conditions, standards, and guidelines have been developed for each of these for improving conditions by reducing historical, ongoing, and potential impacts through restoration activities and moving towards desired conditions through project implementation. Although key watersheds have not been specifically designated in the Forest Plan, a guideline in Watersheds and Water would focus watershed restoration and maintenance, and vegetation treatments, on priority 6th code watersheds to ensure that ecosystem processes, resilient vegetation conditions, and natural disturbance regimes are functioning properly. See FW-Water-G-2. Instead of using a "riparian reserve" approach to maintain and restore aquatic habitat, the Forest Plan has direction related to riparian areas, water, watersheds, aquatic habitat and aquatic species in a variety of places, most prominently in Watersheds and Water, Riparian Areas, and Wildlife, Fish, and Plants. Some of the desired conditions and guidelines that promote resiliency, hydrologic, physical, chemical, and biotic integrity, maintenance of physical and natural processes, base flow, riparian communities, groundwater recharge, and species diversity include FW-Water-DC-1, 2, 3, 5, 6, and 7; FW-Water-G-3 and 6; FW-Rip-All-DC-1, 2 and 5, FW-Rip-Strm-DC-1, 2, 3, 4 and G-1, FW-Rip-WtInds-DC-1, 2, FW-Rip-Spr-DC-1, 2, 3, 4, and 5, and FW-Rip-Spr-G-1, 3, and 4, FW-Rip-RipType-DC-1, 2, 4, 5, 6, and G-1, 3, and 4, FW-WFP-DC-3, 4, and 5, FW-Invas-DC-1, 2 and G-1 and 2, FW-Graz-G-4, 5, and 7, FW-RdsFac-G-5 and 9, FW-Rec-All-G-2, and FW-Rec-Disp-G-5. The Forest Plan directs the design and implementation of buffers, called aquatic management zones, in riparian areas to avoid detrimental changes that would seriously and adversely affect water conditions, fish habitat or connected downstream cave, karst, and lava tube resources. See FW-Rip-All-G-3. Aquatic management zones would also be established in non-riparian, intermittent streamcourses to maintain channel functioning, downstream water quality, riparian habitat, and function. See FW-Rip-Strm-G-2. On the Coconino NF, road density and use is addressed through the implementation of the Travel Management Rule and the plan has language to support that implementation. See FW-RdsFac-S-1 and FW-Rec-Disp-S-1. The Forest Plan does not prescribe the scale at which project-level analyses are done, however it does have plan direction that is intended to be applied

at all scales. The Forest Plan has objectives to restore the function of non-functioning and functioning-at-risk riparian areas with emphasis on priority 6th code watersheds; to restore 5-10 wetlands not in proper functioning condition; to restore riparian function to at least 25 springs identified as not in proper functioning condition; and to restore or enhance at least 70 miles of stream habitat. See FW-Rip-All-O-1, FW-Rip-WtInds-O-1, FW-Rip-Spr-O-1, and FW-WFP-O-4.

Commenter: Lininger, Jay

Comment:

The Forest Service should disclose in the EIS what it knows about the existing condition of aquatic ecosystems and associated species on national forest lands, particularly at-risk fishes amphibians and reptiles, and their food resources. NEPA requires the Forest Service to take a hard look at the success or failure of the existing Forest Plan (USDA 1987), as amended, and so-called "best management practices" at meeting statutory and regulatory requirements to provide for fish and wildlife viability.[...] Water diversions, groundwater depletion, management impacts to riparian and upland habitats, and general declines in physical and biological conditions including water temperature, hydrologic flows and sediment regimes contribute to current degraded conditions. Such radical physical alterations to the aquatic environment cause changes in ecosystem organization. There may be reduced efficiency of nutrient cycling, changes in productivity, reduced species diversity, changes in the size distribution and life-history traits of certain fauna, increased incidence of disease, and increased population fluctuations with increasing levels of stress (Woodwell 1970, Odum 1985, Rapport et al. 1985, Moyle and Leidy 1992). Climate change poses additional potential to reduce water availability and habitat suitability for aquatic organisms (Seager et al. 2007, Seager and Vecchi 2010).

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Comment:

Riparian habitat NFMA implementing regulations require forest plans to make special provision for the ecological integrity and function of riparian areas: Special attention shall be given to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. This area shall correspond to at least the recognizable area dominated by the riparian vegetation. No management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment shall be permitted within these areas which seriously and adversely affect water conditions or fish habitat. Topography, vegetation type, soil, climatic conditions, management objectives, and other factors shall be considered in determining what management practices may be performed within these areas or the constraints to be placed upon their performance. 36 C.F.R. § 219.27(e) (1982). Current management direction (USDA 1987), as amended, clearly is not adequate to meet NFMA requirements for riparian areas (USDA 2009). Indeed, no fewer than 18 species are at imminent risk of extinction due to riparian habitat degradation in the Coconino National Forest. Nevertheless, the draft plan proposes no new management direction to remedy the situation. It would repeal existing standards and guidelines that establish measurable protection for stream banks, flow regimes, water quality and other features of aquatic habitat in the existing Forest Plan (USDA 1987). The only relevant plan direction does not remedy the currently degraded condition of riparian areas or assure viability of species dependent on properly functioning aquatic habitat.

Response:

The Forest Plan has numerous desired conditions that relate to the ecological integrity and function of riparian areas, stream banks, flow regimes, and other features of aquatic habitat. See FW-Eco-DC-3; FW-Water-DC-1-7, FW-Rip-All-DC-1-5; FW-Rip-Strm-DC-1-4; FW-Rip-WtInds-DC-1, 2; FW-Rip-Spr-DC-1-5; FW-Rip-RipType-DC-1-6; FW-WFP-DC-4, 5, 6 Guidelines that specifically apply to functioning aquatic and riparian ecosystems include: FW-Water-G-1-6; FW-Rip-All-G-2; FW-Rip-Strm-G-1; FW-Rip-Spr-G-1-4, FW-Rip-RipType-G-1, FW-WFP-G-3, and FW-RdsFac-G-5 and 9. In addition there are objectives in the plan to restore wetlands, springs, non functioning and function-at-risk riparian areas, and stream habitat. See FW-Rip-WtInds-O-1; FW-Rip-Spr-O-1, FW-Rip-All-O-1, and FW-WFP-O-4. In regards to areas near the edge of perennial water, an aquatic management zone is required to protect water quality and to avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits that would seriously and adversely affect water conditions, fish habitat, or connected downstream cave, karst, and lava tube resources. As a general starting point, the zone width in riparian areas ranges from 100 to 150 feet on each side of the streamcourse or riparian area depending on erosion hazard (See FW-RipAll-G-3). A management approach for All Riparian Areas recommends project level analysis to determine whether the zone should be wider or narrower. It reads: Consider Table 1 as a general starting point for determining the width of the aquatic management zone relative to erosion hazard. Aquatic management zones may be wider or narrow than suggested in Table 1 and would be decided at the project level. Considerations for the size and shape of an aquatic management zone include amount and type of material on the ground, width and slope of the zone, soil type or hydrologic soil group, orientation of stream or river to the sun, connection of stream to impaired or non-attaining waters, presence of threatened or endangered species, condition of the riparian area, adjacent land use, and threat of contamination from pollutants or chemicals. Significant topographic changes, such as abrupt canyon edges may be used as boundaries for aquatic management zones, as long as activities beyond the canyon walls do not negatively influence the functioning of the aquatic management zone. Because non-riparian streamcourses could also negatively affect perennial waters, an aquatic management zone is also required for non-riparian, intermittent streamcourses to reduce sedimentation, maintain functioning of the channel within its floodplain, and maintain downstream water quality and riparian habitat and function. This management zone would also avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses, or sediment deposits that would seriously and adversely affect water conditions, fish habitat, or connected downstream cave, karst, and lava tube resources. See FW-Rip-Strm-G-2. The Stream Ecosystems section includes a management approach similar to the one in All Riparian Areas but in addition, it mentions consideration of ephemeral streamcourses that might influence downstream water quality. In addition, a site-specific aquatic management zone would be required for new projects and management activities around reservoirs to protect water quality and to avoid detrimental changes in water temperature or chemical composition, blockages of streamcourses,

or sediment deposits that would seriously and adversely affect water conditions or aquatic habitat. See FW-ConstWat-G-1.

Commenter: Lininger, Jay

Comment:

The draft plan's identification of management indicator species ("MIS") is highly controversial because it: (1) fails to capture the range of PNVNT that host species whose viability is of planning concern; and (2) significantly changes course from the current Forest Plan (USDA 1987), which designates a wider range of MIS that better represent habitats found on the Coconino National Forest, in keeping with the requirements of NFMA. Together, those species are assumed to indicate management effects on other species associated with a small portion of the Coconino National Forest. The draft plan proposes a change of management direction from the current Forest Plan (USDA 1987) by omitting several MIS that have been used to measure effects of management activities on habitats and species whose populations must remain viable under NFMA. There is no explanation for this drastic change of course.

Response:

There is no requirement to select a management indicator species (MIS) for every ecological response unit (ERU). Rather MIS were selected for ERUs where management activities and restoration objectives are planned and change would be expected during the life of the plan: Ponderosa Pine (Gambel oak sub-type), Mixed Conifer with Aspen, and Mixed Conifer with Frequent Fire ERUs (Mexican spotted owl), Ponderosa Pine (old growth and snags) ERU (pygmy nuthatch), and grassland ERUs (pronghorn antelope). Threatened, endangered, and sensitive (TES) species have individual analyses in the environmental impact statement and the Biological Assessment and Biological Evaluation. Gunnison's prairie dogs are discussed in the Biological Assessment because they are a primary food item for black-footed ferrets as well as in the Final Environmental Impact Statement and the Species Viability Report. Application of the 17 MIS identified in the 1987 plan was found to be less than useful because some species are habitat generalists (e.g., elk use grasslands, woodlands, forests, riparian areas, etc.) so their populations are not closely tied to management in any one habitat or ERU. In addition, population changes of some 1987 plan MIS were too difficult to assess compared to influences (e.g., macroinvertebrates in watersheds that have more influencing factors than can be measured). Additional details on the review of the 17 MIS that are identified under the 1987 plan can be found in the Management Indicator Species Status Report for the Coconino National Forest (USDA Forest Service 2013) found in the plan set of documents. Also, in lieu of selecting for a whole variety of birds that can be influenced by management and a broad range of species associated with water on the Coconino NF, two "ecological indicators" or EIs were selected. Aspen is an ecological indicator of habitat diversity, and early seral stages in the following ERUs: Mixed Conifer with Aspen, Mixed Conifer with Frequent Fire, Spruce-Fir, and in localized areas in Ponderosa Pine. The Monitoring Plan has a question that reads: How much have management activities contributed to maintaining or moving towards desired conditions for aspen? Aquatic macroinvertebrates were selected as an ecological indicator of water quality. The Monitoring Plan has a question that reads: Have management activities contributed to impairment of warm water or cold water streams based on aquatic macroinvertebrate metrics?

Comment:

Habitat-proxy approaches to species viability have rarely been tested in any context (Martino et al. 2005). Lawler and others (2003) compared the ability of seven taxa (freshwater fish, birds, mammals, freshwater mussels, reptiles and amphibians) to indicate the viability of other species assumed to associate with similar habitat in the Middle Atlantic region of the United States. No taxonomic group provided protection for more than 58% of other species (Lawler et al. 2003 - Table 2). The documented shortcomings of a taxon-based or habitat-proxy approach is linked to the rarity of some species. For example, species with more restricted ranges are less likely to be protected by management of habitat at taxonomic scales than more widespread species. Lawler and others (2003) found that at-risk species performed relatively well as an indicator group, but their viability accounted for an average of just 84% of all species. In addition to this overlap problem and uncertainty regarding the effectiveness of a target species approach to conserving ecosystem diversity in general, and species viability in particular, other sources of uncertainty also must be considered, including: (1) species-specific habitat associations, (2) the validity of vegetation modeling, (3) population fitness, and (4) cumulative effects over space and time. Examples of cumulative effects include competition of non-native species, and habitat conditions on non-federal lands, which are inadequate to support viable populations of fish and wildlife.

Response:

In evaluating species viability, a coarse filter/fine filter approach was used. Each evaluated species was associated with its primary habitat (the coarse filter) which could be an ERU or riparian area, and primary threats to the habitat were identified. An estimated was made as to the amount of occupied habitat as well as the amount of potentially suitable habitat for each species. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the revised plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. Management approaches were generally developed to address threats for which the Forest Service does not have complete jurisdiction. However, the coarse filter/fine filter approach does not assume that habitats are a proxy for viability, nor is the viability analysis process a habitat proxy. In addition, there is no National Forest Management Act (NFMA) requirement to spatially demonstrate adequate habitat for each species and the Vegetation Dynamics Development Tool (VDDT) modeling is not spatially explicit. The viability analysis grouped species by the ERUs or habitat element(s) they rely on for habitat. Other wildlife specialist reports assessed these species relative to requirements based on their status (e.g., federally listed, Southwestern Region sensitive species, management indicator species, etc.). For example, federally listed species were also analyzed in accordance with Endangered Species Act requirements in the biological assessment. The analysis of species viability was conducted as directed in accordance with National Forest Management Act (36 CFR § 219.19) that defines a viable population as, "one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning areas." This species viability analysis is not population viability analysis which is the probability of a population persisting for a biologically meaningful timeframe and which often seeks to identify a minimum number of individuals for population persistence.

Commenter: Lininger, Jay

Comment:

Furthermore, the spatial distribution of each PNVT should be field-verified and mapped with a high degree of precision, and then monitored continuously if it is to be reliably and accurately used as a proxy for species viability. Professional opinion of agency workers regarding distribution of habitat is not a sufficient basis to meet NFMA species viability requirements. See *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998) (requiring public to receive the underlying environmental data from which the Forest Service experts derive their opinions and conclusions). The analysis must supply the public with ability to independently determine that use of the PNVT types described in the DEIS and draft plan are reliable and accurate proxies for species viability, as required by NFMA. See 36 C.F.R. § 219.19 (1982) ("For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area [...] [H]abitat must be well distributed so that [] individuals can interact with others in the planning area.").

Response:

In evaluating species viability, a coarse filter/fine filter approach was used. Each evaluated species was associated with its primary habitat (the coarse filter) which could be an ERU or riparian area, and primary threats to the habitat were identified. An estimated was made as to the amount of occupied habitat as well as the amount of potentially suitable habitat for each species. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the revised plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. Management approaches were generally developed to address threats for which the Forest Service does not have complete jurisdiction. However, the coarse filter/fine filter approach does not assume that habitats are a proxy for viability, nor is the viability analysis process a habitat proxy. In addition, there is no National Forest Management Act (NFMA) requirement to spatially demonstrate adequate habitat for each species and the Vegetation Dynamics Development Tool (VDDT) modeling is not spatially explicit. The viability analysis grouped species by the ERUs or habitat element(s) they rely on for habitat. Other wildlife specialist reports assessed these species relative to requirements based on their status (e.g., federally listed, Southwestern Region sensitive, management indicator species, etc.). For example, federally listed species were also analyzed in accordance with Endangered Species Act requirements in the biological assessment. The analysis of species viability was conducted as directed in accordance with National Forest Management Act (36 CFR § 219.19) that defines a viable population as, "one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning areas." This species viability analysis is not population viability analysis which is the probability of a population persisting for a biologically meaningful timeframe and which often seeks to identify a minimum number of individuals for population persistence.

Commenter: Lininger, Jay

Comment:

Aspen stands are declining within the Coconino. Livestock grazing suppresses aspen regeneration (Sampson 1919, Houston 1954, Kay 2001, Beschta and Ripple 2010). To protect declining aspen stands, livestock, areas that contain aspen stands should be excluded from livestock grazing and classified as unsuitable for this activity.

Response:

Specific direction to exclude livestock grazing from aspen has not been added to the Forest Plan. Although the requested changes have not been made, the concern expressed regarding the potential impacts of livestock grazing on aspen is still addressed by other Forest Plan components. A guideline in the Forest Plan requires livestock grazing to be managed to meet, or move towards, the desired conditions for forest resources such as soil, water, vegetation, and species. Also, structural range improvements (fences, earthen stock ponds, etc.) should be located, constructed, reconstructed, maintained, and used in a manner consistent with desired conditions for sensitive resources, including aspen, and salt and/or other supplements should be used and located so sensitive resources are protected from grazing related impacts. See FW-Graz-G-2, 4, and 5. The Aspen and Maple section includes several desired conditions for aspen. See FW-TerrERU-AspMpl-DC-1, 2, and 3. These plan components will guide decisions on livestock grazing in aspen. Suitability is discussed in chapter 4 of the plan and appendix C of the FEIS. Aspen could be determined to be unsuitable through future site specific decisions but were not determined to be unsuitable in this process. For additional information on grazing suitability, see the response to comment suggesting that the Forest Service conduct a grazing capability and suitability analysis in compliance with the National Forest Management Act.

Commenter: Lombardi, Christine

Comment:

The rural communities of this area, Cornville to Beaver Creek and those in between, are in need of system trails that connect these communities together and PROTECT future recreation areas. Also a MAJOR hub of social trails for non motorized individuals which WOULD connect these communities AND is heavily used by the people of this area is a vast area behind the asphalt pile on Cornville Rd. People on both sides of I-17 use this area for recreation. Walking, hiking, mountain biking, and horseback riding. Cottonwood residents, Sedona and Camp Verde and literally the ENTIRE Verde Valley uses this unmarked trail head. I have been told the county leases the area that we park in and allows us to park there. What is REALLY NEEDED is an official trail head and official trails of that area. We refer to the asphalt pile as 'THE DRY BEAVER CREEK TRAIL HEAD'. From this trail head one can access Beaver Head Flat Rd, Hwy 179, Hwy I-17 (east and south by crossing under Cornville Rd) , and other parts of Cornville Rd area on the south side of the road. I am sure the communities on the east side of I-17 also have many trails intertwined with their neighborhoods that need protection and right of way approved.

Response:

The Forest Plan has been adjusted in response to these comments. The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not decide whether to establish any new trails or trail systems. However, desired conditions have been added to the Verde Valley Management Area that guide trail system design. See MA-VerdeV-DC-2 and 3. Several management approaches have been added to the Verde Valley Management Area to remind forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Lovely, Cynthia

Comment:

Page 141, 2nd paragraph under Dispersed Recreation: Please remove reference to the 1996 Sedona Urban Trails and Pathways Plan, which is outdated and no longer relevant. It is also not clear as to what the "Redrock Trails Plan" is.

Response:

The Forest Plan has been adjusted in response to this comment. The management approach that referenced the Redrock Trails Plan and the Sedona Urban Trails and Pathway Plan has been removed from the Forest Plan. The concept of working with the City of Sedona and other municipalities during trail planning efforts is still addressed in the Forest Plan. A management approach in the Trails and Trailheads section reminds forest managers to: Collaborate with county and city trails coordinators, local groups, and area residents, when conducting trail planning. Consider needs for nonmotorized and motorized trails and provide opportunities for both.

Commenter: Lovely, Cynthia

Comment:

Page 11 map, please add the City of Sedona to the map.

Response:

The Forest Plan has been adjusted in response to this comment. The City of Sedona has been added to figure 3 in the Forest Plan.

Commenter: Luettjohann, Heather

Comment:

As full time residents of Mormon Lake and members of the Mormon Lake fire dept. we would like to go on the record in favor of option "A" No Changes. We have Hunted and played in these areas all our lives and our children and grandchildren should be able to do so as well. As these are "public lands" we the "public" require and deserve access to use said lands. The forest service has already closed many roads in and around this area of which we were opposed as well. Please do not take any more of our backyard away from us!!!

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: Luisa, Rodriguez

Comment:

We need to preserve and expand nature for ourselves and our children and grandchildren.

Response:

The Forest Plan contributes to ecological, social, and economic sustainability focused on meeting the needs of the present generation without compromising the ability of future generations to meet their needs. The Forest Plan gives direction to manage the forest consistent with the Multiple Use-Sustained Yield Act of 1960 and provides goods and services including outdoor recreation, timber, range, watershed, wildlife, and fish. Forest plan direction applies to activities and uses on forest-administered lands, not privately owned lands. The Scenery Resources section has desired conditions, standards, guidelines, and objectives that are intended to maintain or improve scenic integrity objectives. This section also points to the Landscape Character Description document (see Appendix D in the plan) which has information on the desired conditions associated with different landscapes on the forest.

Commenter: Mabey, Trenton

Comment:

I am an avid hiker in the Sedona area. There are more than enough off-road trails used by the Pink Jeep tours. These tours leave the red rocks scarred and stained. I urge you to limit the number of new trails for off-road vehicles and look for ways to curb the destruction to the existing landscape.

Response:

The Forest Plan proposes to manage trails to provide a variety of opportunities, including motorized use. See FW-Rec-Trails-DC-1 and 2. Decisions on where to allow motorized use are guided by the Forest Plan, but are made at the project level based on site-specific information and analysis. An absolute prohibition on additional motorized trails is not being included in the Forest Plan. The Forest Plan includes direction for motorized recreation management and the potential impacts associated with motorized recreation. See FW-Rec-Disp-DC-1, 2, and 3, FW-Rec-Disp-S-1, and FW-Rec-Disp-G-1.

Commenter: Mackin, Tom

Comment:

The next topic will address the suitability of mechanized or motorized use as covered under the proposed WHMA's, and as mentioned in the proposed plan speaking about the Travel Management guidelines adopted in 2011. As publicized during the comment period leading up to the TMR decision, approximately 50% of the Forest users enjoy driving Forest roads for wildlife viewing, hunting, OHV'ing, birding, wood cutting and other perfectly legal pastimes. With the ROD in 2011, adopting Alternative 3 at that time, 59% of the CNF road mileage was closed to the public and almost 97 % was closed to dispersed camping and big game retrieval. Since 1998, OHV ownership in our State has increased 348%, according to information on the G&F website and during the educational period following TMR, approximately 30% of the vehicles observed on CNF roads were either OHV's or transporting OHV's, a huge portion of the public Forest users. Any management proposals to further reduce legal access to these public lands through Wilderness or WHMA designations should be considered to be not in the best interest of a substantial portion of our citizens. An example of the heavy handed management actions would be the infamous 72 hour "rule" publicized by the Forest last fall preceding the very popular Fall hunting seasons.

Response:

No change has been made in response to this comment. The transportation suitability determination that is the topic of this comment is part of Alternative C. It was included in and analyzed as part of that alternative to respond to concerns that the forest plan revision effort needed to consider management options that would reduce impacts associated with motor vehicles. Including this topic in Alternative C provided the Forest with the opportunity to analyze and disclose the effects on a broader range of alternatives. The transportation suitability determination in Alternative C is not part of the Forest Plan. Furthermore, specific decision on the Forest's transportation system are not made in the Forest Plan, but at a project level, through the travel management process. The travel management process provides analysis on proposed changes to the motorized transportation system.

Commenter: Mackin, Tom

Comment:

Of the 4 alternatives presented Alternative B should be selected as the preferred alternative because it will provide many needed updates to the current plan while limiting the designations of new wilderness areas, road closures and recreational shooting restrictions. I actively volunteer/donate my time and money to improve these resources and I believe I'm voicing legitimate concerns regarding the management of these public lands.

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Mackin, Tom

Comment:

Large blocks of intact and undeveloped public lands are critically important for providing wildlife habitat and also provide for outstanding public hunting opportunities. However, a formal wilderness designation limits active management to improve or restore wildlife habitat or to reduce fuel loads to prevent catastrophic wild fires. The FS should pursue options other than a formal a wilderness designation for conserving large undeveloped tracts of land to retain their value for wildlife and dispersed outdoor recreation, and still allowing for focused management activities that conserve and restore habitats, and promote a healthy forest. While some additional wilderness designations may be appropriate for smaller areas or to add on to existing areas, increasing wilderness acres on the CNF by almost 50% could have a significant adverse impact on those who enjoy motorized recreation, including wildlife viewing, hunting, geo-caching and other legal responsible uses. Problems with wildfire management, maintaining existing infrastructure for utilities, livestock and wildlife, Search and Rescue missions and other necessary activities could also suffer under alternative C. By comparison, alternative B would serve to identify some additional wilderness while not going overboard with alternative C.

Response:

The Forest Plan Revision effort includes two alternatives that were analyzed in detail that do not propose any recommended wilderness areas. See alternatives A and D in the environmental impact statement. All of the alternatives include direction that protects large blocks of intact and undeveloped land on the Forest. There are nine inventoried roadless areas on the Forest totaling about 50,571 acres. These areas are managed to maintain their overall roadless character under all alternatives. The Landownership Planning/Land Classification section in Alternative A includes direction to consider acquiring and disposing of land to increase the undeveloped and contiguous nature of the Forest. See 1987 Plan, pages 84-88. Alternatives B (modified), C, and D include similar direction. For example, the Land Adjustments section expresses a desired for a mostly contiguous land base that has a natural-appearing landscape that has not lost its wildland character. See FW-LndAdj-DC-1.

Comment:

Current population figures are courtesy of the US Census Bureau. Further problems with many of the proposed WA's include the presence of numerous existing roads, power lines or corridors, land improvements, such as fences, corrals, and other grazing tools as well as many water developments benefiting numerous species of wildlife. These are generally not pristine, never trammled upon by humans or undisturbed areas.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Mackin, Tom

Comment:

The next topic concerns potential restrictions and constraint from additional wilderness areas(WA), with almost a 50% increase in recommended WA's under alternative C, bringing the total WA acres to approximately 250,000. The supporting documents for this proposal point to an under representation of wilderness opportunities but further examination indicates that Arizona is quite well represented in wilderness areas with at least 90 designated locations totaling over 4 million acres, an average of about .65 acres for every man, woman and child resident.[...]This is almost triple the national average of approximately .25 acres per US resident.[...]While admitting that populations to our State are increasing, estimated to be 1.5% for 2013 by the Census Bureau, much of that population influx as well as birth rates from existing residents are within the Hispanic ethnicity area, a group that is not frequently known for their forays into the peace and solitude of wilderness areas.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term

commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

The first topic I'd like to address is the proposal in Alternative C to ban recreational shooting on over 500,000 acres of proposed Wildlife Habitat Management Areas. While I support limitations on recreational shooting near homes, businesses, organized campgrounds or other similar locations I cannot support the widespread prohibition of recreational shooting in all proposed Wildlife Habitat Management Areas, under the guise of not disturbing wildlife. Arizona is a right to carry state, a legal, responsible possession and use of firearms is constitutionally guaranteed. According to the Department of Public Safety, at least 31% of Arizona residents own firearms and responsibly maintaining proficiency, providing training to other friends and family members and enjoying recreational shooting should not be curtailed on such a vast area of public lands, especially in the absence of nearby public shooting facilities, an issue that has been a problem on the Coconino NF for many years caused at least in part by local and Regional Forest managers. There are numerous other State and Forest laws and regulations that exist regarding firearm possession and responsible use that can be called upon to address improper activities. A 2011 poll of almost 1,000 widely diverse US citizens conducted for the National Shooting Sports Foundation found that over 71% of the respondents approved of recreational shooting, done in a responsible and appropriate fashion. Recent Federal guidelines also recommend developing or allowing recreational shooting on public lands when and where possible. Prohibition because of possible irresponsible use by a very small portion of the public should not make outlaws of the many responsible users. The proposal appears arbitrary given that no scientific justification is provided to demonstrate that recreation shooting is in fact harming wildlife. Rather than instituting an across the board ban on recreation shooting in WHMA's, the USFS should focus on enforcing current laws and restrictions and addressing specific problems in specific areas.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Comment:

There are numerous other tools that can be used to achieve many of the goals presented as justification for the proposals and like wilderness advocates often recommend, the least disturbing should be used. Effective Forest Service law enforcement in problem areas, seasonal road restrictions similar to those currently used on some areas of Anderson Mesa, implementation of a Forest Service Courtesy Patrol during high use weekends to remind visitors of current rules and guidelines are just some of the suggestions that may be better suited for wider public acceptance.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating

of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Martyn Goforth, Kathleen

Comment:

We recognize the challenge the Forest Service faces by implementing a land and resource management plan that will rely heavily on prescribed burns and wildfire to achieve Plan objectives. We commend the Forest Service for acknowledging the potential air quality impacts associated with these treatments by proposing a revised Coconino Plan that identifies "guidelines and management approaches for reducing smoke emissions" (p. 18). Though the Coconino National Forest has good air quality, the fine particulate matter generated during wildland fire does present a human health risk. We recommend that the Forest Service implement BMPs and work with Arizona Department of Environmental Quality air quality officials to reduce emissions from prescribed burns and wildfires to the greatest possible extent.

Response:

The Forest Plan includes components that tier to and require the Forest to meet all air quality regulations and legal requirements. See FW-Air-DC-1 and FW-Air-G-1. The Air Quality section in the Forest Plan also includes several management approaches regarding coordination with the Arizona Department of Environmental Quality regarding impacts to air quality from prescribed burns and wildfires. They state: Coordinate with ADEQ during prescribed burns to comply with State and Federal regulatory requirements for emissions and impacts to Class I areas. Coordinate with ADEQ during wildfires to ensure ADEQ is aware of potential smoke impacts to receptors. In addition, smoke sensitive areas should be identified and management objectives and courses of action should be developed to mitigate impacts to those areas. Smoke sensitive areas are areas in which smoke from outside sources is intolerable for reasons such as heavy population, existing air pollution, or intensive recreation or tourist use. See FW-Air-G-2. An additional management approach was added to consider design features, best management practices, or mitigation measures to reduce fugitive dust where needed.

Commenter: Martyn Goforth, Kathleen

Comment:

Maximize Forest Resiliency through Wilderness Designation We recommend that the Forest Service consider adding wildemess acreage to the Preferred Alternative comparable to the amount included in Alternative C. The DEIS states that under Alternative C additional wildemess acres would be recommended on the forest to "provide additional protection to botanical and wildlife resources" (p. 20). Considering the management challenges facing Coconino plrumers (both currently, and over the life of the revised Plan), including encroaching development and the effects of climate change, among other pressures, and the stress these pressures will bring to bear on Coconino resources, particularly sensitive plant and animal species, it would seem most prudent to implement a Preferred Alternative with the maximum possible wilderness acreage, thereby ensuring the greatest forest resiliency and maximizing the achievement of restoration objectives.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term

commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: McClure, Kim

Comment:

Protect wildlife habitats and recreation areas from the noise and lead pollution that accompanies recreational shooting. Alternative C closes the following important areas to recreational shooting: Research Natural Areas, Botanical and Geological Areas, Wildlife Habitat Management Areas, Walnut Canyon Management Area, Sedona Neighborwoods Management Area, Long Valley Management Area, and part of the Flagstaff Neighborwoods Management Area. We support closure of these areas.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions, such as prohibiting shooting in particular areas. However, the Forest Plan does contain several components that provide a framework to manage recreation activities and encounters. The All Recreation section identifies minimal user and resource conflicts as a desired condition. See FW-Rec-All-DC-6. A guideline in the same section requires recreational activities, locations, and/or settings to be managed to have minimal user conflicts. See FW-Rec-All-G-2. The Dispersed Recreations section contains a desired condition for areas used for dispersed recreation across the forest to retain their natural character to the extent possible and have minimal evidence of human waste and litter, sanitation issues, and resource damage. See FW-Rec-Disp-DC-3. Noise is addressed by an All Recreation desired condition which seeks opportunities for experiencing solitude and natural soundscapes that are consistent with ROS objectives. See FW-Rec-All-DC-10. Finally, the Soil section would address potential impacts through a desire for soil productivity and functions that are sustained and functioning properly within the capability of the site. See FW-Soil-DC-2. Specific determinations on whether and how to address recreational shooting in specific areas would be done through future project-level decisionmaking based on site specific information.

Commenter: McClure, Kim

Comment:

Due to the limited water resources in our region, the Forest Plan should declare snowmaking to be an incompatible use on the Coconino National Forest.

Response:

The Forest Plan does not expressly declare snowmaking as an incompatible use on the Forest. However, the Forest Plan does contain several components that provide a framework that can be applied to protect the limited water resources in this region, the federally listed endangered San Francisco Peaks Ragwort, and the San Francisco Peaks Traditional Cultural Property. The Watersheds and Water section includes desired conditions to sustain water quantity (base flows) of intermittent and perennial streams within the historic range of variability. See FW-Water-DC-5. Water quality and water quantity is desired to be at levels that support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities, and, at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. See FW-Water-DC-6. Finally, it is a desired condition for water quality to meet or exceed Arizona water quality standards and support identified designated beneficial uses. See FW-Water-DC-7. To be consistent with the Forest Plan, a proposed activity must be consistent with these desired conditions or a forest plan amendment would be required to authorize the activity. The Forest Plan includes a desired condition for habitat conditions to contribute to the survival and recovery of listed species and contribute to the delisting of species under the Endangered Species Act. See FW-WFP-DC-2. As with the concerns with water quantity and quality, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. The Forest Plan also includes a desired condition for traditional cultural properties to be preserved and protected for their cultural importance. As with the concerns with water quantity and quality and endangered species, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. Accordingly, the strategic approach employed by the Forest Plan provides guidance relevant to the concerns expressed in these comments without being overly prescriptive and dismissing an activity without considering it at the project level where site specific information can inform the decision.

Commenter: McClure, Kim

Comment:

Illegal trail-building and off-road-vehicle damage have been problems on the Coconino National Forest, damaging fragile soils and archaeological sites and creating conflicts among forest users. The Forest Plan should explain how the Forest Service will enforce road closures and penalize illegal trail builders to protect resources and other forest users.

Response:

No change to the plan has been made in response to this comment. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect.

Commenter: McClure, Kim

Comment:

The Forest Service should enlarge its Walnut Canyon Management Area to cover the entire footprint of the Walnut Canyon Study Area and should consider it for a Special Designation.

Response:

No change has been made in response to these comments. The boundary of the Walnut Canyon Study Area would be difficult to find on the ground, which would make implementation difficult. The Walnut Canyon Management Area boundary was developed with topographical features and landmarks in mind to make the boundary more locatable on the ground. The Walnut Canyon Study has been completed and transmitted to the Secretary of Agriculture. The study presents 3 options to the Secretary, one of which is consideration of the area for special designation. The Secretary currently has the study under consideration and the Forest is waiting for a recommendation on how to proceed.

Commenter: McClure, Kim

Comment:

Biological soil crusts anchor soils, protecting them from erosion, while contributing to plant health and nutrient cycling. They are extremely hard to restore once destroyed. The Draft Plan says that it's fine to impact a third of soil crusts. There is no scientific justification for allowing this level of destruction. The Forest Service must do more to protect soil crusts.

Response:

The desired condition that addresses biological soil crusts has been adjusted in response to comments. See FW-Soils-DC-4. The reference to a third of the area impacted was removed because it was confusing and not supported by scientific literature. The desired condition now contains an expression of what biological soil crusts should do, not levels of disturbance. Potential impacts to soil resources, including biological soil crusts, will be considered at the project level based on the soil resources that are present in the project area and the activities that are being considered.

Commenter: McClure, Kim

Comment:

Areas that have wilderness character should be protected from future impacts.

Response:

The Forest conducted a potential wilderness area evaluation as part of this forest plan revision effort. See the Potential Wilderness Area Evaluation Report (USDA Forest Service 2016) for the details on this effort. That evaluation was used to identify the potential wilderness areas that should be recommended. Alternative B (modified) includes three recommended wilderness areas and Alternative C includes 13 recommended wilderness areas. These are the areas that were identified with sufficient wilderness character to consider recommending them for wilderness designation. Both of these alternatives include direction to manage these recommended wilderness areas to maintain their wilderness character. See SA-RWild-DC-1 through 6 and SA-RWild-G-1 through 5. These plan components will apply to the recommended wilderness areas until Congress decides on whether to designate them as wilderness. If they are designated as wilderness, the plan components for designated wilderness would be applied to them. See the SA-Wild section of the Forest Plan.

Comment:

The plan should ensure the Coconino provides opportunities for solitude and quiet recreation away from human impacts. The Forest Service should elevate all 13 areas eligible for wilderness designation to Recommended Wilderness Areas (RWA).

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

The Plan Revision for the Coconino National Forest #32780 should have strong standards and guidelines in order to protect and restore healthy forest ecosystems.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

There should be management indicator species (MIS) selected that can indicate the health of all vegetation types, including riparian, aquatic, desert, interior chaparral, pinyon-juniper, spruce-fir, and alpine tundra. The Draft Plan only includes three MIS, which will be used to monitor ponderosa pine, mixed conifer, Great Basin grasslands, and montane grasslands.

Response:

There is no requirement to select a management indicator species (MIS) for every ecological response unit (ERU). Rather MIS were selected for ERUs where management activities and restoration objectives are planned and change would be expected during the life of the plan: Ponderosa Pine (Gambel oak sub-type), Mixed Conifer with Aspen, and Mixed Conifer with Frequent Fire ERUs (Mexican spotted owl), Ponderosa Pine (old growth and snags) ERU (pygmy nuthatch), and grassland ERUs (pronghorn antelope). Threatened, endangered, and sensitive (TES) species have individual analyses in the environmental impact statement and the Biological Assessment and Biological Evaluation. Gunnison's prairie dogs are discussed in the Biological Assessment because they are a primary food item for black-footed ferrets as well as in the Final Environmental Impact Statement and the Species Viability Report. Application of the 17 MIS identified in the 1987 plan was found to be less than useful because some species are habitat generalists (e.g., elk use grasslands, woodlands, forests, riparian areas, etc.) so their populations are not closely tied to management in any one habitat or ERU. In addition, population changes of some 1987 plan MIS were too difficult to assess compared to influences (e.g., macroinvertebrates in watersheds that have more influencing factors than can be measured). Additional details on the review of the 17 MIS that are identified under the 1987 plan can be found in the Management Indicator Species Status Report for the Coconino National Forest (USDA Forest Service 2013) found in the plan set of documents. Also, in lieu of selecting for a whole variety of birds that can be influenced by management and a broad range of species associated with water on the Coconino NF, two "ecological indicators" or EIs were selected. Aspen is an ecological indicator of habitat diversity, and early seral stages in the following ERUs: Mixed Conifer with Aspen, Mixed Conifer with Frequent Fire, Spruce-Fir, and in localized areas in Ponderosa Pine. The Monitoring Plan has a question that reads: How much have management activities contributed to maintaining or moving towards desired conditions for aspen? Aquatic macroinvertebrates were selected as an ecological indicator of water quality. The Monitoring Plan has a question that reads: Have management activities contributed to impairment of warm water or cold water streams based on aquatic macroinvertebrate metrics?

Commenter: Miranda, John

Comment:

Already today, the experience of visiting Sedona in 2014 is very different than what we may have known say just 20 years ago. More traffic, more development, less tranquility. Please consider future generations, and do not allow rampant development to go each year as more and more growth negatively changes the scenery of Northern Arizona.

Response:

The Forest Plan contributes to ecological, social, and economic sustainability focused on meeting the needs of the present generation without compromising the ability of future generations to meet their needs. The Forest Plan gives direction to manage the forest consistent with the Multiple Use-Sustained Yield Act of 1960 and provides goods and services including outdoor recreation, timber, range, watershed, wildlife, and fish. Forest plan direction applies to activities and uses on forest-administered lands, not privately owned lands. The Scenery Resources section has desired conditions, standards, guidelines, and objectives that are intended to maintain or improve scenic integrity objectives. This section also points to the Landscape Character Description document (see Appendix D in the plan) which has information on the desired conditions associated with different landscapes on the forest.

Commenter: Morningstar, Michael

Comment:

Additional trails will not reduce misuse but only expand it. Those who practice poor trail etiquette will still go off trail, leave behind garbage, chop down trees, camp illegally, and have illegal fires. Expanding trails and creating new ones will only make those who misuse the Coconino more difficult to find.[...]new plan should not call for any more motor vehicle trails, and should curtail such activities in areas where misuse and lack of enforcement is known to be a problem

Response:

The Forest Plan proposes to manage trails to provide a variety of opportunities, including motorized use. See FW-Rec-Trails-DC-1 and 2. Decisions on where to allow motorized use are guided by the Forest Plan, but are made at the project level based on site-specific information and analysis. An absolute prohibition on additional motorized trails is not being included in the Forest Plan. The Forest Plan includes direction for motorized recreation management and the potential impacts associated with motorized recreation. See FW-Rec-Disp-DC-1, 2, and 3, FW-Rec-Disp-S-1, and FW-Rec-Disp-G-1.

Commenter: Mullen, John

Comment:

Ref Alternative B - Pine Belt Mgt Area There is no mention of how the Stoneman Lake Road is to be maintained. In other areas of Alt B such as the Red Rock All American Road or the Schnebly Hill Road it speaks to desired conditions and guidelines. I would like to see Stoneman Lake Road maintained at its present level - not improved. No paving or widening. Conversely having it graded 3 or 4 times a year and culverts maintained for proper drainage. Dispersed camping is allowed along much of this road. Improving (paving) would be in conflict with this use as well as other recreation pursuits such as hunting. Light recreation traffic is conducive with dark skies. Heavy traffic at night if the road were to be improved could be in conflict with dark skies. The Discovery telescope is just southeast of the Stoneman Lake Road. Please add wording to protect the present level of maintenance and usage of the Stoneman Lake Road. And keep our dark skies dark with dispersed camping and light recreation use on this roadway.

Response:

The Forest Plan is not the appropriate document in which to classify the maintenance level for specific roads or determine their need for maintenance. Likewise, the Forest Plan also does not make specific decision on traffic management. Rather, the Forest Plan provides direction for the management of the transportation system on the Forest. For example, the Roads and Facilities section includes a desired condition for the Forest to have a well-maintained road system. See FW-RdsFac-DC-1. Decisions on which maintenance level to assign to a road are administrative determinations made as part of the management of the transportation system. Decisions on when and where to conduct maintenance are made based on site-specific information and analysis and appropriated budgets for that activity. Prioritization of road maintenance planning is outside the scope of the Forest Plan and the plan revision process. Maintenance planning is a requirement of Forest Service Manual 7732.11 that requires the forest to: Develop annual road maintenance plans based on road management objectives and expected traffic for all National Forest System Roads. Clearly display the allocation of available funds in highest priority order in road maintenance plans in case of funding short falls.

Commenter: Mullen, John

Comment:

Ref Alt B - Anderson Mesa There is no mention of how road conditions are to be maintained. Other areas of Alt B address this issue such as Red Rock All American Road or the Schnebly Hill Road. My concern is that ADOT at some future time will improve and pave FR 125 - the Kinniknick Road between Twin Arrows (new casino) on Hwy I-40 and Lake Mary Road. There were also proposals to I-17 looking to put a highway across Anderson Mesa intersecting with I-40 east of Flagstaff. Either of these concepts would conflict with the Desired Conditions as stated on pg 126. Wildlife viewing and pronghorn migration would be affected. Recreational opportunities for dispersed camping and hunting would be compromised. Maintain Anderson Mesa as a recreational and ranching area. Do not allow it to be carved up with improved roadways.

Response:

The Forest Plan is not the appropriate document in which to classify the maintenance level for specific roads or determine their need for maintenance. Likewise, the Forest Plan also does not make specific decision on traffic management. Rather, the Forest Plan provides direction for the management of the transportation system on the Forest. For example, the Roads and Facilities section includes a desired condition for the Forest to have a well-maintained road system. See FW-RdsFac-DC-1. Decisions on which maintenance level to assign to a road are administrative determinations made as part of the management of the transportation system. Decisions on when and where to conduct maintenance are made based on site-specific information and analysis and appropriated budgets for that activity. Prioritization of road maintenance planning is outside the scope of the Forest Plan and the plan revision process. Maintenance planning is a requirement of Forest Service Manual 7732.11 that requires the forest to: Develop annual road maintenance plans based on road management objectives and expected traffic for all National Forest System Roads. Clearly display the allocation of available funds in highest priority order in road maintenance plans in case of funding short falls.

Commenter: Mullen, John

Comment:

Ref - Alternative B pg 164-165 concerning Red Rock All-American Road. There should be mention of large commercial trucks useage being routed on 89A. The roundabouts do not handle large vehicle traffic well. If the commercial vehicle has no business in the Village of Oak Creek he should be encouraged to access Sedona via 89A coming form Hwy 260 Cottonwood.

Response:

Management of the vehicles used on State Route 89A is outside of the scope of the Forest Plan. The Forest uses the process established under the Travel Management Rule to designate routes managed by the Coconino NF for motor vehicle use.

Commenter: Murdock, Erik

Comment:

The Access Fund and the local climbing community agree with the Plan's goal, regarding the desired condition for dispersed recreation sites, that "[c]aves, cliffs, and talus slopes have geological features that provide unique habitats for plants and wildlife, including some rare species, and are protected from damage or alteration that may result from recreational uses such as cave exploring and rock climbing."³ The Access Fund is also committed to supporting the stated 'desired conditions' for rock climbing activities to "not diminish the quantity or quality of specialized vegetation, such as lichens, and wildlife communities nor do these activities disrupt life processes of rare or threatened species."

Response:

This management direction has been retained in the Forest Plan, but rearranged to address the topics individually. For example, specialized habitats are addressed in separate desired conditions. See FW-BioPhys-Geo-DC-2, 3, 4, 6, and 7. Instead of focusing on potential impacts from caving and rock climbing in the desired condition, a concern was converted into a more strategic guideline that seeks to maintain the integrity of these geological features regardless of the activity. See FW-BioPhys-Geo-G-1. The desired condition related to potential impacts from rock climbing and other recreational activities duplicated other guidance in the Geological Features and Dispersed Recreation sections. To reduce redundancy in the Forest Plan, this desired condition was merged with the plan components in these other sections. See FW-BioPhys-DC-1 and FW-Rec-Disp-DC-3.

Commenter: Murdock, Erik

Comment:

In order to maintain the integrity of the climbing environment and support resilient climbing resources, the Access Fund and local climbers need to be intimately involved in the research and management of climbing sites in order to foster balance between recreation demands and sensitive resources. Therefore, the Access Fund would like to be involved in the ongoing Lake Mary Ecosystem Analysis in relation to the high-quality bouldering and climbing resources within that management area. Climbers also need to be involved in the ongoing Mt. Elden recreation resources planning process.

Response:

Thank you for your interest in projects on the Coconino NF involving climbing resources. The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not make decisions on climbing resources in specific areas. The Forest Plan provides the framework that would guide site-specific consideration of climbing resources. For example, an All Recreation desired condition seeks to provide a broad spectrum of developed and dispersed recreation settings, ranging from undeveloped (which offer opportunities for primitive character, challenging access, and solitude) to more developed (which offer easier access, higher levels of social interaction, and increased user comforts). See FW-Rec-All-DC-4. The Forest Plan also includes a management approach in the All Recreation section that reminds forest managers to: Collaborate with state and federal agencies including National Park Service, Arizona State Parks, AZGFD, concessionaires, chambers of commerce, nonprofit organizations, Northern Arizona University, state, city and county governments, recreation stakeholders, local communities and citizens, partners and volunteers regarding provision of recreation opportunities in Northern Arizona and communicating these to the public. Work in partnership to find creative solutions to operate and maintain recreation sites, trails and trailheads, and provide interpretive and environmental education. Determine gaps and overlaps in opportunities and resolve conflicts between users, and providers. Work together to determine activities that increase our capacity to serve a diverse population while promoting social, economic and natural resource sustainability.

Commenter: Murdock, Erik

Comment:

Raptors The Plan states that "[a]ir tour companies and rock climbing activities should not disturb occupied eyries between March 1 and August 31, to protect the area during the peregrine falcon breeding season and to protect other raptor species sensitive to noise disturbance."⁵ Nationwide, many successful raptor regulations are based on site monitoring and cliff characteristics, and are therefore flexible in terms of both temporal and spatial extent. The Access Fund recommends that a monitoring system should be used to properly inform a flexible regulatory tool instead of relying on a fixed closure that will result in unnecessary collateral impacts to recreational and commercial climbing opportunities. The Access Fund has compiled many scientific raptor studies, examples of successful and flexible restriction systems, as well as produced the handbook, Raptor and Climbers, in consultation with biologists and land managers.

Response:

This guideline was adjusted in response to the comment. The guideline was merged with several other plan components to create a more strategic guideline. The revised guideline can be found at FW-WFP-G-8. The revised guideline still requires timing restrictions to protect wildlife, such as peregrine falcons, but it leaves the identification of the exact dates of the timing restrictions to site-specific decisions which can ensure that the right time frame is protected for the area and species involved without being unnecessarily restrictive to other activities. A management approach was added to the Wildlife, Fish, and Plants section of the revised Plan to provide additional clarity for this guideline. It reminds forest managers that: The application of seasonal timing restrictions is site-specific and may vary depending on variables such as species, weather, timing of activity relative to species life cycle, or duration, frequency, and type of activities that are occurring in the species' habitat. Other variables to be considered could include the duration, extent, and intensity of the proposed activity, or the type of activity itself, such as emergency or safety related actions versus non-emergency activities. The best available information and science is utilized to develop seasonal restrictions to reduce impacts to disturbance sensitive species.

Commenter: Murdock, Erik

Comment:

Climbing Management The Access Fund endorses the development of "a rock climbing management strategy for the Oak Creek Vista area that addresses climbing needs, visitor safety and resource protection."⁷ However, the Access Fund and local climbers should assist with this 'management approach' for the Oak Creek Canyon Management Area in order to ensure that the strategy addresses the site specific needs of the climbing community. The Access Fund publication, Climbing Management: A Guide to Climbing Issues and the Development of a Climbing Management Plan⁸ is a valuable resource to help direct successful climbing management strategies.

Response:

This management approach has been adjusted to have more strategic, forestwide application and moved to the Dispersed Recreation section. It states: Develop management plans and/or strategies through collaborative efforts for specific dispersed recreation activities or locations to address user needs, visitor safety, and resource protection. Activities or locations could include motorized recreation for Cinder Hills OHV Area, rock climbing at the Oak Creek Vista, and mountain biking around Sedona. Another Dispersed Recreation management approach addresses the concern that the climbing community should be involved in management of recreation opportunities on the Forest. It states: Establish long-term partnerships with recreation organizations to help plan, construct, and maintain motorized and non-motorized recreation opportunities and foster a low impact conservation ethic.

Commenter: Murdock, Erik

Comment:

Travel Management Many roads on the Coconino NF are critical for accessing climbing resources. The Access Fund and the local climbing community want to be involved in the travel planning process to protect access to important climbing resources and help the Forest Service identify critical, as well as redundant, roads and trails. Climbers can play a key role in identifying currently unmanaged roads that are necessary for accessing well-used climbing resources. For example, the Kelly Canyon and Woody Mountain roads need to be maintained to facilitate access to high-quality bouldering sites.

Response:

Motorized access for recreational activities is addressed in several places in the Forest Plan, however no one type of recreational activity (i.e., wildlife-based recreation) is highlighted over another. One desired condition in the Roads and Facilities sections has been adjusted to address this comment. The adjusted plan component specifically acknowledges a desire for reasonable motorized access (by road) for recreation. See FW-RdsFac-DC-1. A similar desired condition in the Trails and Trailheads section applies to motorized use on trails. See FW-Rec-Trails-DC-1. The Dispersed Recreation section contains a desired condition for motor vehicle use to occur at sustainable levels while providing opportunities for a variety of motorized use types and levels of challenge for a diversity of users. See FW-Rec-Disp-DC-2. Specific motorized use determinations are done through project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Motor vehicle use on the Forest has been and continues to be addressed through implementation of that rule. The Forest Plan includes a standard prohibiting motor vehicle use beyond the designated system of roads, trails, and areas, as defined on motor vehicle use maps. See FW-Rec-Disp-S-1 and FW-RdsFac-S-1.

Commenter: Murray, J.R.

Comment:

Snowbowl's Master Development Plan should be recognized in the Forest Plan. Absent of direct recognition, a statement of acknowledgement of approved Master Development Plans as policy should be adopted or included in the appropriate location within the Plan.

Response:

The Forest Plan references outside sources of information, such as the Master Development Plan, in Appendix D. A reference to the Master Development Plan has been included in San Francisco Peaks Management Area section in Appendix D.

Commenter: Murray, J.R.

Comment:

The Ski Area Summer Activities Policy which recognizes the importance of creating year round recreational opportunities at ski areas on a national level should be recognized. At the least, the Plan should include a statement or statements that recognize that ski areas can provide a wide spectrum of recreation to meet growing expectations of the general public and to mitigate and offer recreational sites that may be in conflict at other locations within the Forest. There are many "social and unofficial recreational activities" that occur within the Forest that are problematic or damage resources that could and should be offered at ski areas. The Forest Plan should recognize the importance of ski areas contributing to meet these needs. Specifically, ski areas should be allowed to have activities in a consistent manner including mountain biking, biking events, bike parks, chairlift served lift rides and trails, etc. In addition, Zip Lines, Alpine Slides, year round tubing, mountain coasters, and amenities and services that support such activities should be recognized.

Response:

The Forest Plan has been adjusted in response to this comment. The Ski Area Recreational Opportunity Enhancement Act of 2011 has been added to Appendix D, Other Sources of Information along with the other laws, regulations, and policies that apply to Special Uses. The Forest Plan does not expressly address ski areas or the recreational opportunities they may provide. The Forest Plan provides strategic guidance for management of the resources and activities on the Forest. For example, a desired condition in the All Recreation section seeks to provide a broad spectrum of developed and dispersed recreation settings, ranging from undeveloped, with opportunities for primitive character, challenging access, and solitude, to more developed, with infrastructure, easier access, higher levels of social interaction, and increased user comforts. See FW-Rec-All-DC-4. Another All Recreation desired condition seeks minimal user and resource conflicts. See FW-Rec-All-DC-6. Whether a ski area is the appropriate mechanism to help meet or move toward these desired conditions is a project level decision that would be based on site specific information and public involvement.

Commenter: Murray, J.R.

Comment:

Roads within the Forest Management Plan should be identified per the category of designated road status and maintained to the standards of each category. Specifically, Forest Road #516 (Snowbowl Road) is a "level 5 road". The paved road provides access to one of the heaviest utilized areas in the CNF. The road surface is over twenty years old and is showing the need for major maintenance. The current Forest Plan process should identify the need to fund required work on Forest Road #516. Traffic management should also be listed as a priority so planning may be conducted with the Forest Service support and leadership. This will make any future physical changes or practices easier to implement if the concept is mentioned in the Forest Plan.

Response:

The Forest Plan is not the appropriate document in which to classify the maintenance level for specific roads or determine their need for maintenance. Likewise, the Forest Plan also does not make specific decision on traffic management. Rather, the Forest Plan provides direction for the management of the transportation system on the Forest. For example, the Roads and Facilities section includes a desired condition for the Forest to have a well-maintained road system. See FW-RdsFac-DC-1. Decisions on which maintenance level to assign to a road are administrative determinations made as part of the management of the transportation system. Decisions on when and where to conduct maintenance are made based on site-specific information and analysis and appropriated budgets for that activity. Prioritization of road maintenance planning is outside the scope of the Forest Plan and the plan revision process. Maintenance planning is a requirement of Forest Service Manual 7732.11 that requires the forest to: Develop annual road maintenance plans based on road management objectives and expected traffic for all National Forest System Roads. Clearly display the allocation of available funds in highest priority order in road maintenance plans in case of funding short falls.

Commenter: Murray, J.R.

Comment:

With the demand for increased wireless communication sites, Arizona Snowbowl should be identified for providing additional communication sites within the special use permit boundary. The top of the Agassiz Chairlift has been identified as a very favorable site. Snowbowl has existing communication towers and antennas at this location. Combining with a wireless carrier this site can be consolidated with existing ski area equipment and improve visual impacts. The electrical power required to supply the communication site would double as providing power for other needs including services for summer and winter lift riders, improved heating of buildings and shelter, and restroom operation.

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions, such as permitting or prohibiting occupancy, use or access. Decisions to authorize a communication site are made at the project level based on site specific information.

Commenter: Murray, J.R.

Comment:

5. The issuance of Outfitter Permits should be increased if proper business plans are submitted and requisite experience of applicants are satisfied. There is a demand for an outfitter permit on the San Francisco Peaks for offering guided hikes and access to backcountry on a year round basis.

Response:

The issuance of outfitter permits is outside of the scope of the Forest Plan. Site-specific decisions on proposals such as this are made at the project-level, not the Forest Plan level. The Forest Plan provides direction on recreation special uses and how those permitted activities should fit with other forest resources (see FW-SpecUse-DC-8 and FW-SpecUse-G-16, 17, and 18), but it does not make any site-specific decision on any particular permit proposals.

Commenter: O'Brien, Dorothy

Comment:

We ask that extreme use activities, like some Mountain Biking and some illegal motorized ATV use, be moved to designated sections in the Forest Lands that may be able to better withstand this kind of wear and tear. Alternative sites, away from Wilderness and sensitive eco areas, should be considered as remedies for a problem that will not go away. In more than 25 yrs of living here, we have seen that this culture is relentless and will use the public lands, regardless of regulation or permits. So, consider the more robust areas for some extreme use and ask for cooperation and collaboration to maintain the trails overused and worn down by these users.

Response:

The Forest Plan provides the framework that would guide site-specific consideration of these activities. The Forest Plan provides desired conditions for the full array of ecological resources on the Forest. A guideline in the All Recreation section requires recreational activities and locations to be designed and managed to maintain or move towards desired conditions for these other resources. See FW-Rec-All-G-1. Whether these activities are impacting desired conditions in a particular area and how to manage these activities is a site-specific decision. The identification of specific prohibitions on mechanized and motorized travel would be considered in future project-level decisions, including implementation of the Travel Management Rule (36 CFR §212).

Commenter: O'Brien, Dorothy

Comment:

Also, there is no designated areas for beginner users of mountain bikes. A course in a relatively accessible and sustainable area could prevent accidents on more heavily used trails.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not designate areas for beginning mountain bike training. Specific determinations on whether to designate an area for beginning mountain bike education could be done through future project-level decisionmaking based on site specific information. A project considering the designation of such an area would be guided by several components in the Forest Plan. For example, a desired condition in the All Recreation section seeks to provide a broad spectrum of developed and dispersed recreation settings. These settings would range from undeveloped (offering opportunities for primitive character, challenging access, and solitude) to more developed (offering easier access, higher levels of social interaction, and increased user comforts). See FW-Rec-All-DC-4.

Commenter: O'Brien, Dorothy

Comment:

Trail etiquette is not widely known or practiced in the Coconino National Forest. Other National Forests have made headway in this area for heavy multi-use trails. Green Mountain National Forest has signage in place and Stowe, Vermont has a 6 mile long recreation path along rte 100 (that is not in National Forest Lands) but in a very heavily traveled multi-user tourist area in the mountains. It works very well and is well signed with everyone's expectations clear on the signage. Bell Rock Pathway and Little Horse Pathway would greatly benefit from this kind of clear role and etiquette assignment.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. However, the Forest Plan does contain several components that provide a framework to manage recreation encounters. The Interpretation and Education section includes a desired condition for information boards to provide visitor information on, among other things, ethics. See FW-InterEd-DC-3. A guideline in the Interpretation and Education section indicates that trailhead interpretive information should identify the types of designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to reduce user conflicts. See FW-InterEd-G-3. The Trails and Trailheads section includes a guideline for recreational activities, locations, and/or settings to be managed to have minimal user conflicts. See FW-Rec-Trails-G-2. Specific determinations on how and where to address trail etiquette would be done through future project-level decisionmaking based on site specific information.

Commenter: O'Halleran, Tom

Comment:

Wildlife, Fish and Plants. Reference: FW-WFP-G, page 75, #7 Plan Language: Where native frogs and toads occur, established protocols should be followed to prevent the introduction and spread of a chytrid fungus (*Batrachochytrium dendrobatidis*) that kills amphibians. Issue: The Guideline does not stress the importance of following protocols to prevent the introduction and spread of a chytrid fungus. Amphibian populations are plummeting, and the aggressive chytrid fungus is often to blame. Alternative: Replace the Guideline with a Standard that mandates compliance with established protocols to prevent the introduction and spread of a chytrid fungus as soon as the plan is approved. This replacement would fulfill the requirements of 36 C.F.R. Section 219.27(a)(3) (1982) by trying to prevent or reduce hazards from pests.

Response:

The Forest Plan has been adjusted in response to this comment. This guideline was not converted to a standard as suggested, but like standards, compliance with guidelines is required unless the intent of the guideline can be met in another way. Deviation from the explicit provisions of a guideline, if it is meeting the intent of the guideline, must be documented in the project record. See description of Guidelines in the Plan Content section in Chapter 1 of the Forest Plan. The guideline has been adjusted to have broader application on the spread of disease, while listing chytrid fungus as an example. See FW-WFP-G-12. The Wildlife, Fish, and Plants section also includes a management approach that reminds forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish.

Commenter: O'Halleran, Tom

Comment:

Land Adjustment. Reference: FW-LandAdj-G (Plan pg. 96, #2) Plan Language: willing to exchange land that: "has lost its wildland characteristics" or is "needed to meet the needs of communities and the public . . ." Issue: While there are more restrictive provisions on exchanges/adjustments in the Sedona MA, this language is still too vague and permissive and could create confusion if seen as conflicting with the more restrictive language. If land has lost its "wildland characteristics" through neglect, for example, this should not support the right of the Forest Service to then sell or dispose of the land. So, too, the public may claim it "needs" this land, but effort should still be made to preserve the scenic areas and find alternatives for public use outside of the management or forest area. Alternative: Add language in Chapter 2 (Forestwide) that emphasizes that in any situation where the Forest Service is facing a request or considering the sale or disposal of forest land, that it should make every effort to retain the land so that the land does not decrease in size or scenic quality.

Response:

This guideline has been modified to address this concern. Use of the word "willing" in this guideline was not intended to convey a desire to dispose of lands with these qualities. Rather, the intent is for the Forest to consider these types of lands first when engaged in a land adjustment. The guideline has been modified to clarify that intent. See FW-LndAdj-G-2. The Forest Plan does not include express direction to retain all National Forest System lands. Rather, the Forest Plan takes a strategic approach to this concern and identifies what qualities acquired and exchanged lands should have. See FW-LndAdj-G-1 and 2. Scenic integrity is expressly listed as a quality the Forest takes into account when considering land acquisition. See FW-LndAdj-G-1. The concern about less restrictive language overriding more restrictive language is addressed in Introduction for Chapter 2. It notes that in the event of conflicts with other sections of this plan, the more restrictive plan decision always applies.

Commenter: O'Halleran, Tom

Comment:

Land Adjustments. Reference FW-LndAdj-DC-2 p. 95 Plan language: Reasonable access is provided to private inholdings Issue: 'Reasonable' is too broad and too subjective a term. Moreover, it does not identify whether access entails permit for accessing via existing roads or construction of new roads, nor does it specify reasonable to whom - the private landowner or the FS. Alternative: Where roads already exist to the inholding, access is given for travel on such roads. Construction of new access roads must follow Guidelines for Land Adjustments FW-LndAdj-G3 and G4. (p. 96) Suggested wording for new G4: "Construction of new access roads must take into consideration that such access does not conflict with the area's desired condition; does not degrade scenic value of area; does not degrade sensitive areas; does not degrade intrinsic character (e.g., Wilderness, Primitive or Semi-primitive character) of affected area; does not negatively impact water resource areas including perennial and ephemeral streams and their respective riparian zones by river or stream crossings or by bridge construction. New road construction will require an EIS and public input."

Response:

The Forest Plan has been adjusted in response to this comment. The sentence addressing reasonable access to inholdings has been removed from the Land Adjustment desired conditions for two reasons. First, access to neighboring land is addressed in a Roads and Facilities desired condition. See FW-RdsFac-DC-1. The Roads and Facilities desired condition still refers to reasonable access. Reasonableness is determined at the project level based on site specific information and conditions. Proposals to construct new roads would need to be consistent with the National Environmental Policy Act (NEPA), the Forest Service Handbook and Forest Service Manual, and include analysis and opportunity for public involvement. Second, the focus of the Land Adjustment desired condition is supposed to be on acquiring access to National Forest System lands through acquisition of easement rights-of-way across non-National Forest System lands. The desired condition has been adjusted to clarify that intent. See FW-LndAdj-DC-2.

Commenter: O'Halleran, Tom

Comment:

Roads and Facilities. Reference: FW-RdsFac-DC. #4. Page 91, #4 Plan Language: Temporary roads that support ecosystem restoration activities, fuels management, or other short-term projects are rehabilitated promptly after project completion. Unneeded roads are closed and naturalized to reduce human disturbance to wildlife and to reduce soil erosion. Some closed roads are converted to motorized trails or nonmotorized trails for recreational use. Issue: There are no standards or guidelines for determining which roads are converted to motorized trails or nonmotorized trails for recreational use. There needs to be standards or guidelines to protect the ecosystem from motorized trails. Alternative: Change the wording of the last sentence in the Draft Plan from "Some closed roads are converted to motorized trails or nonmotorized trails for recreational use." To the following: Some closed roads are converted to nonmotorized trails if the ecosystem will not be disturbed. Before converting any closed road to a motorized trail, studies need to be conducted to confirm the ecosystem and wildlife will not be disturbed by motorized use, including noise emissions and related results of such use. Another alternative would be to establish a Guideline that states: "Closed roads should not be converted to motorized trails where wildlife, threatened, endangered, and sensitive species are present."

Response:

The Forest Plan has been adjusted in response to this comment. The portion of this component that addressed converting closed roads to trails has been converted into a guideline in the Trails section. See FW-Rec-Trails-G-5. The guideline incorporates the suggestion to consider impacts to other resources when considering whether to convert a closed road to a trail. The guideline does not require the trail to be nonmotorized. That decision would be made at the project level based on site-specific information.

Comment:

Roads and Facilities. Reference: FW-RdsFac-DC, roads page 91, #3 Language: Travel restrictions are clearly understood by forest visitors. Roads to private property provide reasonable access but do not necessarily provide for comfort or all-weather access. Roads that are under easement or special use permit are maintained to Forest Service standards by the permittee or easement holder. Issue: There needs to be a Management Approach for Roads and Facilities to help forest visitors understand the travel restrictions. Alternative: Add a Guideline for Roads and Facilities: The Forest Service will implement an outreach program to educate the forest visitors with information about the travel restrictions on certain roads.

Response:

In addition to the desired awareness of travel restrictions included in FW-RdsFac-DC-3, the Forest Plan includes several other components that address this comment. One of the guidelines in the Roads and Facilities section has been expanded to require signage that facilitates navigation of designated motorized routes and prevents motorized use outside of designated areas and routes. See FW-RdsFac-G-3. Additional direction is located in the Interpretation and Education section. A desired condition in this section creates an express goal to provide forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to work with others to establish interpretive messages and programs for designated motorized routes and areas. It states: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

Comment:

Among other activities, doing the above would help the Forest Service address its obligations under the 1982 planning rule, which requires that a plan appropriately monitor. 36 CFR § 219.12(k) (1982).

Response:

Forest Service Manual direction for groundwater is located in FSM 2880, Minerals and Geology, Chapter 2880 - Geologic Resources, Hazards, and Services. In this context, the term 'geologic' applies to geology and all its subdisciplines, including hydrogeology (subsurface waters). FSM 2880 references three technical guides: the Technical Guide to Managing Ground Water Resources, Groundwater-Dependent Ecosystems: Level I Inventory Field Guide, and Groundwater-Dependent Ecosystems: Level II Inventory Field Guide (USDA Forest Service 2007, 2012a and b). FSM 2540 provides additional direction for groundwater resources in the context of water developments on and off National Forest System (NFS) lands where NFS has a role in water development or transport. This direction requires consideration of ground and surface water interactions where surface and groundwater are connected. It further recognizes the importance of groundwater in sustaining aquatic and riparian ecosystems. In general, the Forest Plan does not repeat law, regulation and policy. Reference to FSM 2880 and FSM 2540 are included in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan. While most of the Forest's groundwater policy is located in the referenced Forest Service Manuals, the Forest Plan contains direction related to groundwater, water flow, and water supply. For example, several desired conditions support conditions that facilitate groundwater recharge. See FW-Water-DC-3, FW-Rip-Strm-DC-3, and FW-Rip-Spr-DC-3. Furthermore, several management approaches in Water and Watersheds that remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest. Coordinate with Federal, county, and state organizations and interested stakeholders with respect to groundwater and surface water issues including preservation, water quantity and timing of flows. The Forest Plan includes a Monitoring Plan in Chapter 5 has been developed to meet the requirements of NFMA and the 1982 Planning Rule. In response to these comments, the Monitoring Plan in Chapter 5 of the Forest Plan has been adjusted. To monitor demand on water resources on the Coconino NF, the Monitoring Plan includes the following question: How many water rights have been procured or how many water rights filings have been done? To monitor water flow and water supply in streams on the Coconino NF, the Monitoring Plan includes the following question: What are surface water trends for Oak Creek, Wet Beaver Creek, and Fossil Creek? Finally, the Forest acknowledges the value of USGS's Regional Groundwater-Flow Model of the Redwall-Muav, Coconino, and Alluvial Basin Aquifer Systems of Northern and Central Arizona (2011). The Forest uses this flow model when evaluating the potential impacts of projects or activities on the Forest. As with FSM 2880 and FSM 2540, this flow model is referenced in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan.

Comment:

Tin Can: * Help in the preservation and unique qualities of the Fossil Springs Wilderness Area. * The area has panoramic views and unique rock formations. * The area has a few unique and rare plants and animals, including Chiricahua leopard frog. Evaluation Report at 61. * The wilderness characteristics of this area would be enhanced. It would increase the remoteness and opportunities for solitude on the forest within the adjoining Fossil Springs Wilderness. The area would promote wilderness recreation. Evaluation Report at 63. * Help preserve the Wild and Scenic values of Fossil Creek.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismarck, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating

of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

Land Adjustments. Reference:, p.96, first paragraph under above heading Plan language: "Consult with local governments about land adjustment proposals the forest plans to take forward into the process. Public input on land exchange begins at the time a site-specific land exchange is proposed." Issue: There is a change in term used: 'adjustment' in first sentence and 'exchange' in the second. Implies different categories: meaning land adjustment is not necessarily the same as land exchange. Alternative: if 'adjustment' and 'exchange' were meant to be interchangeable here, use only one or the other term so as not to confuse the reader. These issues should be reviewed elsewhere in the Draft Plan where these terms are used.

Response:

The Forest Plan has been adjusted in response to this comment. The term "land exchange" has been replaced with term "land adjustment" in the management approach in the Land Adjustment section. It states: Consult with local governments about land adjustment proposals the forest plans to take forward into the NEPA process. Public input on land adjustment begins at the time a site-specific land exchange is formally proposed and has met other land adjustment criteria and plan direction.

Commenter: O'Halleran, Tom

Comment:

Additionally, the Forest Services needs to review the FW-RdsFac-G Guidelines for Roads and Facilities to reassess their classification. Many of these should be standards and should be phrased as requirements rather than items that are to be considered (in other words, to use "shall" or "must" instead of "should"). The standards need to also cover the re-establishment of vegetative cover under 36 C.F.R. 219.27(a)(11). Additional guidelines with details of how the standards can be met can then be added.

Response:

No change has been made to the Roads and Facilities guidelines in response to this comment. Guidelines, like standards, are not optional and must be followed unless the intent of the guideline can be achieved through a different action than is prescribed by the guideline. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the purpose of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. See the Plan Content and the Guiding Future Projects, Program Plans, and Assessments sections in Chapter 1 of the Forest Plan for additional information. Re-establishment of vegetative ground cover is addressed in several locations in the Forest Plan. For examples, see FW-RdsFac-G-6, FW-Soil-DC-3, FW-Water-G-1, FW-Rip-RipType-DC-3, FW-TerrERU-Grass-G-1, FW-TerrERU-IC-DC-4, FW-TerrERU-PJ-DC-4, 9, 10, and 14, FW-TerrERU-PP-DC-2 and 8, FW-TerrERU-MC-All-DC-1 and 2, FW-TerrERU-MC-MCFF-DC-8, FW-TerrERU-MC-MCA-DC-4, and FW-TerrERU-SF-DC-4 and 9.

Commenter: O'Halleran, Tom

Comment:

Roads. Reference: FW-RdsFac-DC (p 91) #1 Language: "[Roads] expand and contract commensurate with use and needs, and it balances the desire for public access with potential for ecological impacts." Issue: This language does not specify in sufficient detail the need to preserve scenic integrity in any road expansion or work related to roads. Alternative: After cited plan language, add: Preservation of scenic and environmental integrity and beauty is paramount in any work described above.

Response:

The Forest Plan has been adjusted in response to this suggestion. The Roads and Facilities desired condition has been adjusted to list protection of scenery as one of the goals associated the Forest transportation system. See FW-RdsFac-DC-1. The Roads and Facilities section also includes a guideline that requires roads to be located, designed, and maintained to move toward or maintain desired conditions for other uses and resources. See FW-RdsFac-G-1. By this reference to the desired conditions for other resources, this guideline incorporates all of the relevant desired conditions from the Scenic Resources section of the Forest Plan.

Commenter: O'Halleran, Tom

Comment:

Forest Products. Reference: FW-FProd-DC, page 82, #4 Language: Collection of forest botanical products is authorized by permit and only when information is available to ensure the product will persist on the forest. Collection of plant species recognized as rare, limited in distribution, threatened, endangered, or sensitive is discouraged except for scientific and cultural purposes. Issue: Collection of species that are rare, limited in distribution, threatened, endangered, or sensitive is too weak. The collection of those species should be authorized only by permit. Alternative: Change the wording to the following: Collection of forest botanical products can occur only when authorized by permit. The permit can be issued only when the permit applicant demonstrates the product (that is, the plant species) will sustainably persist on the forest after the collection. For plant species recognized as rare, limited in distribution, threatened, endangered, or sensitive, permits can be issued only for scientific and cultural purposes and only when the permit applicant demonstrates the product (that is, the plant species) will sustainably persist on the forest after the collection.

Response:

The Forest Plan has been adjusted in response to this comment. The desired condition that discussed the need for a permit to collect, the collection of rare plants, and the collection of forest products by tribes has been broken up to reflect these three thoughts. The suggestion that any collection would need to be authorized by a permit has been dropped from the plan. Collection of forest botanical products is covered by 36 CFR 223 subpart H and FSH 2409.18, Chapter 80, Uses of Timber Other Than Commercial Timber Sales, Special Forest Products - Forest Botanical Products. Because collection of botanical products for personal use is covered by regulation (36 CFR 223 subpart H) and a permit is not always required, the reference to a permit has been removed. However, the Forest Plan does provide direction on commercial plant collection activities, which are not permitted in the Red Rock, Oak Creek Canyon, Sedona Neighborwoods MA's. Removal of commercial national forest products is by permit at designated locations only in the Red Rock MA, House Mountain-Lowlands, Sedona Neighborwoods Management Area. See MA-RedRock-S-6, MA-OakCrk-S-1, 3, MA-HouseMtn-S-1, and MA-SedN-S-1, 3. While a permit may not be necessary in all situations, a guideline has been added to ensure that the collection of species that are rare, limited in distribution, or on the Southwestern Region's sensitive species list should not be authorized unless the species can withstand collection and will persist on the Forest is addressed in a guideline. See FW-FProd-G-4.

Commenter: O'Halleran, Tom

Comment:

Invasive Species. Reference: FW-Invas-G, page 77, #2 Plan Language: Integrated pest management approaches and other treatments to control invasive species should be used to improve watershed condition and maintain ecosystem function while minimizing project impacts on native species. Issue: The Guideline does not contain a time specific statement of measurable, anticipated results. Alternative: Add an Objective such as, "Implement integrated pest management approaches and other treatments to control invasive species within three (3) years of plan approval.

Response:

Integrated pest management is an ongoing process and is considered based on site-specific information as a proposed activity is being considered or as part of an ongoing weed management program. Integrated pest management is incorporated into Forest management activities project by project based on site-specific information.

Commenter: O'Halleran, Tom

Comment:

Wildlife, Fish and Plants. Reference: FW-WFP-G, page 74, #4 Plan Language: Seasonal timing restrictions should be applied for threatened, endangered, and sensitive species; bats; and Golden eagles to protect known nests, roosts, and other special features from habitat alteration and/or disturbance from management activities to avoid disruption of species or their habitats that could affect survival or successful reproduction. Issue: There seems to be no concise, time-specific statement of measurable results in this Guideline. Alternative: Add an Objective that gives a concise, time-specific statements of measurable results, such as, "Within three (3) years of plan approval, implement seasonal timing restrictions for threatened, endangered, and sensitive species; bats; and Golden eagles to protect known nests, roosts, and other special features from habitat alteration and/or disturbance from management activities to avoid disruption of species or their habitats that could affect survival or successful reproduction."

Response:

No change has been made to the Forest Plan in response to this comment. As a guideline, this plan component will be applied immediately to projects and activities developed under the revised Forest Plan. Restating the guideline as an objective could actually dilute its effectiveness by allowing up to 3 years for implementation. This guideline has been adjusted to provide greater protection for listed species. This was achieved by separating the guideline into a standard that addresses listed species and a guideline that applies to Southwestern Region sensitive species and pronghorn. See FW-WFP-S-2 and FW-WFP-G-8. Both of these components were adjusted to refer to "timing restrictions" instead of "seasonal timing restrictions." This change provides greater flexibility for projects to design timing restrictions based on site-specific information, such as the activity and species involved. For example, depending on the activity and potentially impacted species, a restriction on activities during a particular time of day may be sufficient instead of a restriction on an entire season.

Commenter: O'Halleran, Tom

Comment:

Soil Reference: FW-Soil-DC, #4, page 17 Plan Language: "Biological soil crusts are present with limited soil disturbance (<1/3 of area impacted) and functioning on coarse textured and sandy soils." Issue: Biological soil crusts are an essential part of a healthy desert ecosystem. "They hold soil in place, help retain moisture, and improve soil nutrients by fixing atmospheric nitrogen." Draft Plan at 191. It is extremely difficult to restore them or recreate their benefits. The Draft Plan includes the following guideline: "To preserve biological soil crusts, disturbance should be minimized in areas where the percentage of biological soil crusts exceeds 5 percent." Alternative: KSB requests the Forest Service consider a lesser degree of disturbance (using the best available scientific data) and educate the public as to the basis for its proposed amount of allowable disturbance. KSB also requests the Forest Service consider more robust standards and guidelines related to this vital resource that is so difficult to restore that it should perhaps be considered non-renewable.

Response:

The desired condition that addresses biological soil crusts has been adjusted in response to comments. See FW-Soils-DC-4. The reference to a third of the area impacted was removed because it was confusing and not supported by scientific literature. The desired condition now contains an expression of what biological soil crusts should do, not levels of disturbance. Potential impacts to soil resources, including biological soil crusts, will be considered at the project level based on the soil resources that are present in the project area and the activities that are being considered.

Comment:

Public Notification. Reference: Future Changes to the Plan p. 10, first black bullet Language: "Site-specific plan amendments occur to allow specific projects or other activities to deviate from certain plan direction. These amendments occur only for a specific area or a specific project. They do not lead to permanent changes in plan languageSuch amendments are usually proposed with appropriate [NEPA] analysis for the site-specific project proposal. The procedures for processing a site-specific plan amendment are outlined in the applicable planning regulation." Further, p. 10, second black bullet language: "Programmatic plan amendments permanently change the text and language of the plan decisions identified in the earlier section "Plan Decisions" and any other changes that cannot be addressed through administrative corrections or site-specific plan amendments. The procedures for addressing a programmatic plan amendment are outlined in the applicable planning regulation." Issue: As per above texts, it is clear that Amendments represent a way to allow specific projects to deviate from the Plan (site-specific amendments), or to permanently change the text and language of the Plan. In other words, amendments may change site-specific and project-specific management approaches temporarily or change Plan management approaches permanently. The Plan should therefore spell out the time line for the amendment process and summarize the rules for notification of public and the public input process. Reference to "applicable planning regulation" is not adequate, especially since there is no link given for accessing those regulations. Alternative: At the minimum, give information about public notification: where the notification will be published, beginning, duration and end of comment period (at least 30 days if no EIS is prepared, or 90 days if draft EIS is prepared, as per paragraph 219.16, p. 21269, Federal Register, 2012, Vol 77, No 68); how much time after the comment period until amendment is approved and how much time until amendment becomes effective. Full process description can be found in Federal Register, 2012, Vol 77, No 68, p. 21269-21675). If there is a website link to these Rules and Regulations, add the link.

Response:

The Forest Plan has been adjusted in response to this comment. Citations to the applicable regulations have been added to the Futures Changes to the Plan section. The details on the public notification that is required for a change to the Forest Plan can be found in these regulations. Also, a sentence has been added to the Plan Content section in Chapter 1 of the Forest Plan indicating that additional information on public notification of changes to the Forest Plan can be found in the Futures Changes to the Plan section in Chapter 1.

Commenter: O'Halleran, Tom

Comment:

Public Notification. Reference: "Plan Content" Chapter 1, page 5. Language: "The public will be notified of all plan amendments and administrative corrections." Issue: Amendments and administrative corrections are tools with which the Plan can be changed: temporarily by site- and project-specific amendments or permanently by programmatic amendments. Amendments thus can change the management approach, while Administrative Corrections generally do not. It is important that the public be informed about the rules and regulations pertaining to Corrections and Amendments, and so it is necessary that the Plan outlines the rules for the amendment process and provides a reference where the process can be found in detail. No indication is given whether this notification is after or before the amendments and administrative corrections have been made. The Draft Plan should insert reference where the rules and regulations pertaining to such amends can be found, or at least state whether there is the opportunity for public input, what the time frame for such input is, where the announcements are made, and where additional information can be found. All documents related to any such changes should be made available in a discrete location (e.g., same website page) with the notice of the change. Alternative: The public will be notified of proposed administrative corrections and the reason for the corrections by publication on the CNF's Website and in a local newspaper. The public will have a 30-day comment period following publication. (See p. 10 of the Plan for more detail or, for complete Rules and Regulations, Federal Register, 2012, Vol 77, No 68 paragraph 219.16, p. 21269-21675). If there is a website link to these Rules and Regulations, add the link.

Response:

The Forest Plan has been adjusted in response to this comment. Citations to the applicable regulations have been added to the Futures Changes to the Plan section. The details on the public notification that is required for a change to the Forest Plan can be found in these regulations. Also, a sentence has been added to the Plan Content section in Chapter 1 of the Forest Plan indicating that additional information on public notification of changes to the Forest Plan can be found in the Futures Changes to the Plan section in Chapter 1.

Comment:

KSB requests the Forest Service use the best available science to develop appropriate standards and other planning tools that adequately protect riparian zones, including considering many of the issues and planning tools described in Alternative D of the environmental impact statement associated with the 2012 planning rule. 75 Fed. Reg. 26,711, 21,170-71 (May 12, 2010) (noting Alternative D may be appropriate at the plan level for certain areas; KSB is not in a position at this time to fully analyze what parts of Alternative D are most applicable, but KSB notes Alternative D is more robust than what is currently in the Draft Plan). Doing so appropriately will allow the Forest Service to meet its legal obligations under ESA, NMFA, NEPA, and other statutes and regulations; meet the 1982 planning rule requirements; and monitor for and show progress toward desired conditions for riparian areas, which contribute "significantly to . . . ecosystem diversity." Draft Plan at 22.

Response:

The Final Rule and Record of Decision for the 2012 Planning Rule provides a detailed description explaining why Alternative D in the Programmatic Environment Impact Statement was not selected. Among those reasons were the high cost of planning and monitoring associated with the alternative and the recognition that some of the direction would not be appropriate to all National Forest System units. 77 Fed. Reg. 21,162, 21,171 (April 9, 2012) Nonetheless, the Revised Plan includes plan components that protect watersheds and riparian areas. See plan direction in the Watersheds and Water and Riparian Areas sections of the forest plan. For example, while the revised forest plan may not require the establishment of "riparian conservation areas", it does include guidelines to identify and maintain aquatic management zones in riparian areas and nonriparian intermittent streamcourses. The Forest Plan does not identify key watersheds such as in Alternative D but has a guideline to focus watershed restoration and maintenance, and vegetation treatment on priority 6th code watersheds to ensure that ecosystem processes, resilient vegetation conditions, and natural disturbance regimes are functioning properly. See FW-Water-G-2. Similar to Alternative D, the Forest Plan contains guidance for the establishment of aquatic management zones, which are buffers for all riparian areas and for non-riparian, intermittent streamcourses, to reduce sedimentation, maintain channel functioning within its floodplain, and maintain downstream water quality and riparian habitat and function. See Rip-All-G-3 and FW-Rip-Strm-G-2. In addition, soil and water guidelines would implement and monitor best management practices for all activities with the potential to impair water quality... to control and manage nonpoint source pollution and to maintain water quality, quantity, and timing of flows, and to prevent or reduce accelerated erosion. See FW-Soil-G-1 and FW-Water-G-4. Spatial connectivity between upland and aquatic habitats is promoted in the Forest Plan, similar to Alternative D. Connectivity along streams, across floodplains and valley bottoms, between surface and subsurface flows, and between vegetative communities and upland and aquatic habitats is supported by desired conditions in Watersheds and Water, All Riparian Areas, Riparian Forest Types, and Wildlife, Fish and Plants. See FW-Water-DC-4, FW-Rip-All-DC-3 and G-2, FW-Rip-RipType-G-2, and FW-WFP-DC-6. Other desired conditions and guidelines in the Forest Plan promote resiliency, hydrologic and biotic integrity, natural processes, base flow, riparian communities, groundwater recharge, and species diversity. These plan components include FW-Water-DC-1, 2, 3, 5, 6, and 7; FW-Water-G-3 and 6; FW-Rip-All-DC-1, 2 and 5, FW-Rip-Strm-DC-1, 2, 3, 4 and G-1, FW-Rip-WtInds-DC-1, 2, FW-Rip-Spr-DC-1, 2, 3, 4, and 5, and FW-Rip-Spr-G-1, 3, and 4, FW-Rip-RipType-DC-1, 2, 4, 5, 6, and G-1, 3, and 4, FW-WFP-DC-3, 4, and 5, FW-Invas-DC-1, 2 and G-1 and 2, FW-Graz-G-4, 5, and 7, FW-RdsFac-G-5 and 9, FW-Rec-All-G-2, and FW-Rec-Disp-G-5.

Commenter: O'Halleran, Tom

Comment:

Related Plan Content. Reference: "Related Plan Content for Land Adjustments" (Ch. 2 Forestwide Management I- pg. 97) Plan Language: Reference "Sedona Neighborwoods Management Area" Issue: wrong cite Alternative: Change to "Sedona Oak Creek Management Area."

Response:

The "Related Plan Content" sections have been removed from the Forest Plan to remove the appearance that they put forth a complete listing of other related plan content. As with the 1987 Forest Plan, it is necessary to read all of the plan components when implementing the Forest Plan. In general, components are grouped together by resource or program area. For example, most direction on the management of soil will be found in the Soil section and not repeated in other sections. However, there are instances where placing in another section makes the most sense. For example, plan components that affect certain types of bat habitat may be in the Geological Features section, instead of in the Wildlife, Fish, and Plants section, because the plan components only come into plan if particular geological resources are present. See FW-BioPhys-Geo-3.

Commenter: O'Halleran, Tom

Comment:

In the DEIS, the Forest Service Manual (FSM 2521.1) is used to indicate watershed conditions. DEIS at 59. The section further identifies that, of the forest's "6th code" watersheds, 65 percent are functioning-at-risk and 14 percent are impaired. According to Table 3 on page 60, of the 120 6th code watersheds, 98 are either functioning-at-risk or impaired. The question becomes: How is the Forest Service going to meet its three desired conditions under FW-WtrShd-DC given these watersheds have been functioning at these levels for decades and there has been insufficient funding to mitigate the underlying issues? This should be discussed in the Draft Plan.

Response:

The desired conditions for watersheds, like the desired conditions for all other resources, will guide how activities and uses authorized under the Forest Plan are designed and authorized. Desired conditions are aspirational and it is acknowledged that they may only be achievable over a long time frame. There is no specific date by which they are to be achieved. However, as described in the Plan Content section in Chapter 1 of the Forest Plan, projects and site specific activities "must be consistent with desired conditions" The following information has been added to the discussion on desired conditions in the Plan Content section to clarify the ways site specific projects can demonstrate consistency with desired conditions: To be consistent with the desired conditions of the plan, a project or activity, when assessed at the appropriate spatial scale described in the plan (e.g., landscape scale), must be designed to meet one or more of the following conditions: Maintain or make progress toward one or more of the desired conditions of a plan without adversely affecting progress toward, or maintenance of, other desired conditions; or Be neutral with regard to progress toward plan desired conditions; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward other desired conditions in a negligible way over the long term.

Commenter: O'Halleran, Tom

Comment:

Scenic Resources. Reference: FW-Scenic-G #9, p. 115 Plan Language: ... may accommodate additional capacity within the existing corridor. Issue: Powerline areas that may accommodate additional capacity within the existing corridor should be required to bury the lines underground when possible. Alternative: Reword to require powerlines to be buried in existing corridors when possible.

Response:

Several plan components have been modified to address these concerns. This desired condition in the forestwide Special Uses section that addresses the impacts of utility and energy transmission corridors on the forest has been modified to address this concern and clarify its overall intent. Some commenters expressed concern with what appeared to be a general requirement to bury all infrastructure within these corridors, which can raise economic and environmental concerns. Other commenters expressed support for burying all infrastructure in these corridors and asked that vegetation clearing for these corridors be kept to a minimum. After considering all of these comments, the desired condition was adjusted to make it clear that its goal is for this type of infrastructure to not be visible across the landscape, rather than defaulting to burying it. The desired condition has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this type of infrastructure. See FW-SpecUse-DC-3. The corresponding guideline in the Special Uses section that addresses burial of utility lines has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this utility lines. See FW-SpecUse-G-9. With regard to vegetation management, a Special Use desired condition was adjusted to acknowledge that there are legal mandates associated with the vegetation clearing for these corridors and it is a desired condition to meet those legal mandates. See FW-SpecUse-DC-2. While this desired condition recognizes that there is a level of vegetation clearing that is necessary for the safe operation of these corridors, it also recognizes the desire of moving towards other desired conditions applicable to the area. This includes the desired conditions for scenery. To support this desired condition, the forestwide Special Uses section has retained a guideline that requires the retention of vegetation that does not need to be cleared to meet legal mandates to allow screening for scenery, habitat for species, and corridors for wildlife movement. See FW-SpcUse-G-6. Concerns about co-locating infrastructure in an existing corridor before a new corridor is considered were addressed in several plan components in the forestwide Special Uses and Scenery sections. To consolidate this direction in one plan component, the guideline in the forestwide Scenery section that was designed to prevent the widening of utility rights-of-way in areas that have a moderate scenic integrity objective was merged with a similar direction in the forestwide Special Uses section. See FW-SpecUse-DC-3. Whether the additional infrastructure should be buried is addressed by the plan components discussed above.

Commenter: O'Halleran, Tom

Comment:

Current: Water quantity (base flows) of intermittent and perennial streams are seasonally sustained while peak flows and flood potential occur within the historic range of variability for that stream system.[...] Proposed: * Develop an objective and standard for this desired condition. * Water quantity (base flows) of intermittent and perennial streams are seasonally sustained while peak flows and flood potential occur within the historic range of variability for that stream system. The Forest Service will develop a monitoring program to determine if base flow levels are being maintained and to identify management options when base flows are not being maintained.

Response:

Standards and objectives in the Forest Plan have not been added in response to this concern. However, a management approach in Watersheds and Water has been modified to remind managers to: Coordinate with Federal, county, and state organizations and interested stakeholders with respect to groundwater and surface water issues including preservation, water quantity, and timing of flows. The Forest Plan addresses base flow, water quantity, peak flows and flooding through a focus on properly functioning soil, vegetation, streams, and riparian within watersheds which would support base flow, precipitation infiltration and groundwater recharge. There is also a focus on characteristic disturbances. See FW-Eco-DC-1-3; FW-Water-DC-1, 3 and G-1; MA-VerdeV-DC-1. The natural role of water, and channel and floodplain maintenance is highlighted in the sections on All Riparian and Stream Ecosystems. See FW-Rip-All-DC-1 and 2; FW-Rip-Strm-DC-1,3; and FW-Rip-RipType-DC-2. Desired conditions for properly functioning vegetation occurs in individual ERUs but the section titled All Terrestrial ERUs is comprehensive. See FW-TerrERU-All-DC-1 and 2. Other plan components contribute to having sufficient base flow and rapid recovery from disturbances. These include procurement of instream flow water rights, monitoring best management practices to maintain water quantity, and requiring excess water to remain or be allowed to flow freely into natural channels and habitat to maintain and improve water quantity. See FW-Water-G-1, 3, 4, and 6. Desired conditions in the Soil section promote properly functioning soils to infiltrate water and to contribute to suitable hydrologic function and the soil objective focuses on soils that are not functioning properly. See FW-DC-2, 3 and FW-Soil-O-1. Water infiltration is also specifically highlighted in grassland and several terrestrial ERUs. See FW-TerrERU-Grass-DC-5, 6; FW-TerrERU-PP-DC-2 and 10; FW-TerrERU-MC-MCFF-DC-4, FW-TerrERU-MC-MCA-DC-4; FW-TerrERU-SF-DC-4; and MA-InBsn-DC-2.

Comment:

Objective: A well monitoring system shall be developed within three years in the forest to determine if surrounding groundwater pumping is having an impact on the CNF's groundwater resources. [Note: If the Forest Service is currently monitoring wells on the forest, then it should determine if those wells are in locations that provide the information necessary to identify forest-wide trends or watershed trends, especially as relates to desired

Response:

Forest Service Manual direction for groundwater is located in FSM 2880, Minerals and Geology, Chapter 2880 - Geologic Resources, Hazards, and Services. In this context, the term 'geologic' applies to geology and all its subdisciplines, including hydrogeology (subsurface waters). FSM 2880 references three technical guides: the Technical Guide to Managing Ground Water Resources, Groundwater-Dependent Ecosystems: Level I Inventory Field Guide, and Groundwater-Dependent Ecosystems: Level II Inventory Field Guide (USDA Forest Service 2007, 2012a and b). FSM 2540 provides additional direction for groundwater resources in the context of water developments on and off National Forest System (NFS) lands where NFS has a role in water development or transport. This direction requires consideration of ground and surface water interactions where surface and groundwater are connected. It further recognizes the importance of groundwater in sustaining aquatic and riparian ecosystems. In general, the Forest Plan does not repeat law, regulation and policy. Reference to FSM 2880 and FSM 2540 are included in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan. While most of the Forest's groundwater policy is located in the referenced Forest Service Manuals, the Forest Plan contains direction related to groundwater, water flow, and water supply. For example, several desired conditions support conditions that facilitate groundwater recharge. See FW-Water-DC-3, FW-Rip-Strm-DC-3, and FW-Rip-Spr-DC-3. Furthermore, several management approaches in Water and Watersheds that remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest. Coordinate with Federal, county, and state organizations and interested stakeholders with respect to groundwater and surface water issues including preservation, water quantity and timing of flows. The Forest Plan includes a Monitoring Plan in Chapter 5 has been developed to meet the requirements of NFMA and the 1982 Planning Rule. In response to these comments, the Monitoring Plan in Chapter 5 of the Forest Plan has been adjusted. To monitor demand on water resources on the Coconino NF, the Monitoring Plan includes the following question: How many water rights have been procured or how many water rights filings have been done? To monitor water flow and water supply in streams on the Coconino NF, the Monitoring Plan includes the following question: What are surface water trends for Oak Creek, Wet Beaver Creek, and Fossil Creek? Finally, the Forest acknowledges the value of USGS's Regional Groundwater-Flow Model of the Redwall-Muav, Coconino, and Alluvial Basin Aquifer Systems of Northern and Central Arizona (2011). The Forest uses this flow model when evaluating the potential impacts of projects or activities on the Forest. As with FSM 2880 and FSM 2540, this flow model is referenced in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan.

Commenter: O'Halleran, Tom

Comment:

The Forest Service should add objectives, guidelines, and/or management approaches as appropriate to explain the criteria it will use to determine which rights it will seek and how it will seek the rights. This should include a detailed analysis of water supply in the CNF.

Response:

The language relating to maintenance and procurement of instream water rights has been adjusted in the in the Water section in response to your suggestion. Maintenance of existing water rights is addressed in FW-Water-DC-6, which states: Water quality, water quantity and the timing of water flows support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities. Water quality, water quantity, and the timing of flows are sustained at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. Procurement of instream water rights is address in FW-Water-G-3, which states: Instream flow water rights should be procured for those streams without instream water rights to ensure that sufficient flow is provided for aquatic species, habitat, and recreation. In addition to FW-Water-G-3, there are multiple management approaches in the Water section which identify priorities and expectations for the Water program in the future. These management approaches remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest.

Commenter: O'Halleran, Tom

Comment:

Current: New and existing instream water rights are maintained or procured to ensure that enough water is guaranteed to provide for habitat needs, as well as other needs on the forest, over the long term. Proposed: * New and existing instream water rights are procured, instream water rights and groundwater are maintained to ensure that enough water is guaranteed to provide for habitat needs, as well as other needs on the forest, over the long term.

Response:

The language relating to maintenance and procurement of instream water rights has been adjusted in the in the Water section in response to your suggestion. Maintenance of existing water rights is addressed in FW-Water-DC-6, which states: Water quality, water quantity and the timing of water flows support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities. Water quality, water quantity, and the timing of flows are sustained at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. Procurement of instream water rights is address in FW-Water-G-3, which states: Instream flow water rights should be procured for those streams without instream water rights to ensure that sufficient flow is provided for aquatic species, habitat, and recreation. In addition to FW-Water-G-3, there are multiple management approaches in the Water section which identify priorities and expectations for the Water program in the future. These management approaches remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest.

Comment:

FW-Aq-WAT-G Current: No guideline concerning involvement with surrounding communities and stakeholders on groundwater management issues. Proposed Guidelines Water Quantity: * Coordinate with county and state government, local water resource nongovernmental organizations and interested stakeholders with respect to groundwater and surface water preservation. * The Forest Service will participate in ongoing efforts to resolve water resource issues in the watersheds that reside in whole or in part within the CNF. * Within 5 years of Plan approval the Forest Service will identify what scientific studies are needed to determine the amount of water necessary to meet the long-term habitat needs of the CNF, as well as other needs in the forest.

Response:

Forest Service Manual direction for groundwater is located in FSM 2880, Minerals and Geology, Chapter 2880 - Geologic Resources, Hazards, and Services. In this context, the term 'geologic' applies to geology and all its subdisciplines, including hydrogeology (subsurface waters). FSM 2880 references three technical guides: the Technical Guide to Managing Ground Water Resources, Groundwater-Dependent Ecosystems: Level I Inventory Field Guide, and Groundwater-Dependent Ecosystems: Level II Inventory Field Guide (USDA Forest Service 2007, 2012a and b). FSM 2540 provides additional direction for groundwater resources in the context of water developments on and off National Forest System (NFS) lands where NFS has a role in water development or transport. This direction requires consideration of ground and surface water interactions where surface and groundwater are connected. It further recognizes the importance of groundwater in sustaining aquatic and riparian ecosystems. In general, the Forest Plan does not repeat law, regulation and policy. Reference to FSM 2880 and FSM 2540 are included in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan. While most of the Forest's groundwater policy is located in the referenced Forest Service Manuals, the Forest Plan contains direction related to groundwater, water flow, and water supply. For example, several desired conditions support conditions that facilitate groundwater recharge. See FW-Water-DC-3, FW-Rip-Strm-DC-3, and FW-Rip-Spr-DC-3. Furthermore, several management approaches in Water and Watersheds that remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest. Coordinate with Federal, county, and state organizations and interested stakeholders with respect to groundwater and surface water issues including preservation, water quantity and timing of flows. The Forest Plan includes a Monitoring Plan in Chapter 5 has been developed to meet the requirements of NFMA and the 1982 Planning Rule. In response to these comments, the Monitoring Plan in Chapter 5 of the Forest Plan has been adjusted. To monitor demand on water resources on the Coconino NF, the Monitoring Plan includes the following question: How many water rights have been procured or how many water rights filings have been done? To monitor water flow and water supply in streams on the Coconino NF, the Monitoring Plan includes the following question: What are surface water trends for Oak Creek, Wet Beaver Creek, and Fossil Creek? Finally, the Forest acknowledges the value of USGS's Regional Groundwater-Flow Model of the Redwall-Muav, Coconino, and Alluvial Basin Aquifer Systems of Northern and Central Arizona (2011). The Forest uses this flow model when evaluating the potential impacts of projects or activities on the Forest. As with FSM 2880 and FSM 2540, this flow model is referenced in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan.

Comment:

The Draft Plan inadequately addresses the CNF's riparian zones, which are "more productive per acre in biomass of plants and animals than other vegetation communities, and they . . . add[] significantly to . . . ecosystem diversity." Draft Plan at 22. This biomass and diversity includes federally listed and sensitive species. Approximately 23% of riparian areas are "functioning at-risk," and six percent are "nonfunctional." DEIS at 67. These at-risk and impaired areas are threatened by, among other issues, a poor history of road creation and use, dispersed recreation, and grazing. DEIS at 68. While there are seven desired conditions in the forest-wide section regarding "stream ecosystems" (Draft Plan at 23), there are no standards (let alone objectives, guidelines, or management approaches) for this, the most productive of vegetation communities, or to address the known threats to riparian areas. This does not meet the requirements of the 1982 planning rule or the requirements or intent of other laws, such as NFMA, ESA, and NEPA. E.g., 36 C.F.R §§ 219.27(e), (f) (1982).

Response:

Plan direction related to riparian areas, water, watersheds and riparian dependent and aquatic species are found in a variety of places in the Forest Plan. While there are no plan standards, there are desired conditions and guidelines in numerous places that are intended to maintain or improve riparian and aquatic habitats, and plan objectives in Wetlands, Springs, Wildlife, Fish and Plants that would improve to riparian areas and streams. See FW-Rip-WtInds-O-1, FW-Rip-Spr-O-1, and FW-WFP-O-4. In addition, Appendix D identifies some of the law, regulations, and policy that apply to watersheds, water, and riparian areas that are not duplicated in plan direction. Plan direction for riparian areas, which include stream ecosystems, wetlands, springs, and riparian forest types, is included in the Riparian Areas section. While there are no standards for management of riparian areas, the plan direction in the Riparian Areas section provides comprehensive direction for these areas. Soil and water guidelines would implement and monitor best management practices for all activities with the potential to impair water quality... to control and manage nonpoint source pollution and to maintain water quality, quantity, and timing of flows, and to prevent or reduce accelerated erosion. See FW-Soil-G-1 and FW-Water-G-4. Buffers, called aquatic management zones, would be identified and maintained in riparian areas to avoid detrimental changes that would seriously and adversely affect water conditions, fish habitat or connected downstream cave, karst, and lava tube resources. See FW-Rip-All-G-3. Aquatic management zones would also be established in non-riparian, intermittent stream courses to maintain channel functioning, downstream water quality, riparian habitat, and function. See FW-Rip-Strm-G-2. Some of the desired conditions and guidelines that promote resiliency, hydrologic and biotic integrity, natural processes, base flow, riparian communities, groundwater recharge, and species diversity include FW-Water-DC-1, 2, 3, 5, 6, and 7; FW-Water-G-3 and 6; FW-Rip-All-DC-1, 2 and 5, FW-Rip-Strm-DC-1, 2, 3, and 4 and FW-Rip-Strm-G-1, FW-Rip-WtInds-DC-1 and 2, FW-Rip-Spr-DC-1 through 5, and FW-Rip-Spr-G-1, 3, and 4, FW-Rip-RipType-DC-1, 2, 4, 5, 6, and FW-Rip-RipType-G-1, 3, and 4, FW-WFP-DC-3, 4, and 5, FW-Invas-DC-1 and 2, FW-Invas-G-1 and 2, FW-Graz-G-4, 5, and 7, FW-RdsFac-G-5 and 9, FW-Rec-All-G-2, and FW-Rec-Disp-G-5. Connectivity along streams, across floodplains and valley bottoms, between surface and subsurface flows, and between vegetative communities is supported by desired conditions in Watersheds and Water, All Riparian Areas, Riparian Forest Types, and Wildlife, Fish and Plants. See FW-Water-DC-4, FW-Rip-All-DC-3 and G-2, FW-Rip-RipType-G-2, and FW-WFP-DC-6. The standards and guidelines referred to in comment 84-40 do not occur in the Coconino National Forest 1987 plan.

Commenter: O'Halleran, Tom

Comment:

Dispersed Recreation. Reference: FW - SedOak - O - (Draft Plan pg. 136) Plan Language: "Within 10 years of plan approval, develop Schnebly Hill Vista as a viewpoint, interpretative site, and possibly a trailhead." Issue: First - this designation should be "MA" and not "FW" - i.e., it addresses the Sedona/Oak Creek Management Area and is not forest wide. Second, This objective is confusing as worded. It could be read as authorizing/requiring the improvement of the Schnebly Hill Road to allow paved travel to the viewpoint. There is concern about the extent to which motorized traffic could/should have access to the viewpoint at the Merry-Go-Round at the top of the hill. Alternatives: a. Eliminate this objective. The present state of the site is adequate and there could even be a limitation on the type and number of motorized vehicles at the site. Keep it primarily for hiking and biking access. b. Clarify the objective. This would not require the improvement of the current road, for example.

Response:

This objective has been removed from the Forest Plan in response to this comment. This objective was carried forward from the current plan as part of the effort to retain the majority of the direction related to the Sedona-Oak Creek area. There are no current plans to pursue this type of development at Schnebly Hill Vista. Removal of this objective does not prevent the Forest from considering these or other developments in this area in the future. Any project would be required to be consistent with the National Environmental Policy Act (NEPA), the Forest Service Handbook and Forest Service Manual and include analysis and opportunity for public involvement.

Draft

Comment:

The DEIS states: "Drought conditions have prevailed in most years since about 1999 and may have contributed to decreased precipitation, runoff, and water yield." DEIS at 58. Yet as stated in our comments concerning climate change, there is no indication in the Draft Plan about how the Forest Service will emphasize drought management and climate change into the forest monitoring and management plan.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes can be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to

15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Commenter: O'Halleran, Tom

Comment:

Motorized Travel. Reference: Appendix F. Forest Plan Language for Alternatives. DEIS at 972-73 (Alternative D). DEIS Language: a) "any reroute of power lines or expansion of capacity for existing power line corridors should avoid or reduce scenic impacts to [noted areas]. Projects that avoid these areas but cause impacts to scenery elsewhere may change Scenic Integrity Objectives to "Moderate" or "Low"." b) Table 4 (p. 973) would allow Mechanized Travel in Botanical and Geological Areas. Issue: Both of these provisions in Alternative D would significantly impact the scenic integrity of the forest and allow both power lines and mechanized travel in areas that diminish the beauty and serenity of the area. Alternative: Do not adopt any of Alternative D. In particular do not adopt either of these concepts.

Response:

Alternative D is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. Alternative D shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: O'Halleran, Tom

Comment:

Scenic Resources. Reference: Map 15 Scenery Management-Scenic Integrity Objectives, p. 231 Issue: Areas on State Route 179, between the Village of Oak Creek and Sedona City limits includes a Forest Service Designated Scenic Byway. The area to the east is designated as very high SIO. The area on the west is currently only identified as high SIO. This area includes Cathedral Rock and other red Rock formations that should be classified as very high SIO. Similarly there are areas along Verde Valley School Road north of the Village of Oak Creek with significant red rock formations including House Mountain, Cathedral Rock and Oak Creek. Alternative: These are currently classified as high SIO - they should be very high SIO. Additionally the area around Schuermen Mountain should be designated as very high SIO.

Response:

Scenic Integrity Objectives (SIO) were identified through a modeling exercise. Special areas, such as designated wilderness, recommended wilderness, and geological areas, were identified with a very high SIO. Cathedral Rock is not within one of these special areas. However, the scenic value of the features mentioned in the comment were mapped as high SIO in recognition of these features. The larger landscape that surrounds these features does not meet the definition of very high, which requires intact landscapes with only minute, if any, deviations. The development near Cathedral Rock creates a landscape that has more than minute deviations, which makes it inappropriate to apply a very high SIO to it.

Commenter: O'Halleran, Tom

Comment:

Wilderness Reference: Strawberry Crater Wilderness General Description (p. 153); SA-Wild- Straw-DC # 2 and #3 (p. 154) Plan Language: General Description: "Because of the relatively open terrain and easy access from major roads, motor vehicle intrusion into the wilderness is an issue." DC #2: "Vehicle intrusions are rare and signing, fencing, and wilderness patrols on the boundary effectively enforce restrictions." DC #3: "The construction of barriers and signage along the wilderness boundary prevent motor vehicle intrusion along the south and west boundaries of the wilderness. Educational materials about the sensitive soils and plants are provided to visitors." Issue: It is unclear whether motor vehicle intrusion is an actual issue (as seems to be described in the General Description) or a potential issue. If it is an actual issue, the DCs are insufficient to actually address a known issue. Alternative: If vehicle intrusions are not an issue, please explain to the public how that was determined and then delete the above-referenced sentence in the General Description. If intrusions are an issue, then the Forest Service needs to draft objectives and consider drafting standards or guidelines to address this issue.

Response:

The Forest Plan has been adjusted in response to this comment. The topic of motorized intrusions into wilderness areas is addressed by a desired condition that seeks effective boundary management. See SA-Wild-DC-6. Because motorized and mechanized intrusions would be problematic for any wilderness area, this desired condition has been written to apply to all wilderness areas on the Forest. Some of the information from the desired conditions have been converted into a guideline that requires barriers and signs along the Strawberry Crater Wilderness to be designed to prevent motor vehicle intrusions. See SA-Wild-G-10.

Commenter: O'Halleran, Tom

Comment:

Scenic Resources. Reference: General Description for House Mountain-Lowlands Management Area Language, p. 144. Plan Language: The desired conditions for scenery from this management area may also apply to the House Mountain-Lowlands MA if the site being analyzed at the project level fits the landscape character described for those management areas. Issue: the wording needs to be changed from "may" to "shall". Alternative: Insert "shall" for "may".

Response:

The suggested modification has not been incorporated into the Forest Plan because of a reorganization of these management areas. The four management areas that encompass the Sedona-Oak Creek area have been reorganized to make them easier to use. The Oak Creek Canyon, Sedona Neighborwoods, and House Mountain-Lowlands management areas are no longer subsections of the Sedona-Oak Creek Management Area. These three management areas have been adjusted to be stand alone management areas like the Sedona-Oak Creek Management Area. Management area direction from the Sedona-Oak Creek Management Area that applied to these other three management areas has been copied into those management areas and adjusted if necessary. To help clarify that the management area formerly called Sedona-Oak no longer applied to the entire region, that management area was renamed the Red Rock Management Area. With the overlapping direction removed, each management area now has its own desired condition for scenery which identifies the Landscape Character Description that should be used for that management area. See MA-RedRock-DC-10, MA-OakCrk-DC-11, MA-HouseMtn-DC-6, and MA-SedN-DC-4. The discussion on overlapping direction has been removed from the General Description and Background sections for all of these management areas. The General Description and Background for Scenic Resources still acknowledges that even though management area boundaries are distinct, where a desired landscape character applies on the ground is not always distinct and may vary over time. Accordingly, on-the-ground interpretation of these desired landscape character descriptions by a forest landscape architect or other qualified individual is acceptable based on site-specific knowledge and documentation.

Commenter: O'Halleran, Tom

Comment:

Scenic Resources. Reference: General Description for Oak Creek Canyon Management Area Language, p. 141. Plan Language: The desired conditions for scenery from this management area may also apply to the Sedona Neighborwoods MA if the site being analyzed at the project level fits the landscape character described for those management areas. Issue: the wording needs to be changed from "may" to "shall". Alternative: Insert "shall" for "may".

Response:

The suggested modification has not been incorporated into the Forest Plan because of a reorganization of these management areas. The four management areas that encompass the Sedona-Oak Creek area have been reorganized to make them easier to use. The Oak Creek Canyon, Sedona Neighborwoods, and House Mountain-Lowlands management areas are no longer subsections of the Sedona-Oak Creek Management Area. These three management areas have been adjusted to be stand alone management areas like the Sedona-Oak Creek Management Area. Management area direction from the Sedona-Oak Creek Management Area that applied to these other three management areas has been copied into those management areas and adjusted if necessary. To help clarify that the management area formerly called Sedona-Oak no longer applied to the entire region, that management area was renamed the Red Rock Management Area. With the overlapping direction removed, each management area now has its own desired condition for scenery which identifies the Landscape Character Description that should be used for that management area. See MA-RedRock-DC-10, MA-OakCrk-DC-11, MA-HouseMtn-DC-6, and MA-SedN-DC-4. The discussion on overlapping direction has been removed from the General Description and Background sections for all of these management areas. The General Description and Background for Scenic Resources still acknowledges that even though management area boundaries are distinct, where a desired landscape character applies on the ground is not always distinct and may vary over time. Accordingly, on-the-ground interpretation of these desired landscape character descriptions by a forest landscape architect or other qualified individual is acceptable based on site-specific knowledge and documentation.

Commenter: O'Halleran, Tom

Comment:

Scenic Resources. Reference: General Description for Sedona Neighborwoods Management Area Language, p. 140. Plan Language: ...The desired conditions for scenery from Sedona/Oak Creek and Oak Creek Canyon MA may also apply to the Sedona Neighborwoods MA if the site being analyzed at the project level fits the landscape character described for those management areas. Issue: the wording needs to be changed from "may" to "shall". Alternative: Insert "shall" for "may".

Response:

The suggested modification has not been incorporated into the Forest Plan because of a reorganization of these management areas. The four management areas that encompass the Sedona-Oak Creek area have been reorganized to make them easier to use. The Oak Creek Canyon, Sedona Neighborwoods, and House Mountain-Lowlands management areas are no longer subsections of the Sedona-Oak Creek Management Area. These three management areas have been adjusted to be stand alone management areas like the Sedona-Oak Creek Management Area. Management area direction from the Sedona-Oak Creek Management Area that applied to these other three management areas has been copied into those management areas and adjusted if necessary. To help clarify that the management area formerly called Sedona-Oak no longer applied to the entire region, that management area was renamed the Red Rock Management Area. With the overlapping direction removed, each management area now has its own desired condition for scenery which identifies the Landscape Character Description that should be used for that management area. See MA-RedRock-DC-10, MA-OakCrk-DC-11, MA-HouseMtn-DC-6, and MA-SedN-DC-4. The discussion on overlapping direction has been removed from the General Description and Background sections for all of these management areas. The General Description and Background for Scenic Resources still acknowledges that even though management area boundaries are distinct, where a desired landscape character applies on the ground is not always distinct and may vary over time. Accordingly, on-the-ground interpretation of these desired landscape character descriptions by a forest landscape architect or other qualified individual is acceptable based on site-specific knowledge and documentation.

Commenter: O'Halleran, Tom

Comment:

Roads. Reference: MA-SedOak-G-18, p. 138 Plan Language: Dry Creek Road (FR 152) "...allows access by the careful driver of a standard low clearance vehicle." Issue: This is not possible and is inconsistent with desired conditions. Alternative: Eliminate this language.

Response:

The Forest Plan has been adjusted in response to this comment. The direction related to maintenance of Dry Creek Road has been adjusted to manage road for safety and minimum standards to maintain rough conditions, low traffic speeds, and the challenging, narrow character of the roadway. See MA-SedN-G-2.

Commenter: O'Halleran, Tom

Comment:

Land Adjustments. Reference: MA-SedOak-G-14, p. 138 Plan language: National forest parcels less than or equal to 10 acres in size in the Sedona/Oak Creek MA could be disposed of under the Small Tracts Act of 1983 (P.L. 97-465), Townsite Act of 1958 (P.L. 85-569), or General Exchange Act of 1922 (U.S.C. 16 485,486) to resolve encroachment issues or provide lands needed for public purposes. Issue: No limit is given to the number of parcels that could be disposed of under the cited Acts - this could potentially be abused and add up over time. Providing lands for public purpose such as schools or utilities is already covered. Alternative: a. Remove this provision altogether. b. If it is kept in the Plan, then add language that "in any effort to dispose of land under any one of these cited statutes there will be an effort made to preserve both the size and scenic integrity of the area consistent with the stated goals, desired conditions and standards of this plan."

Response:

The Forest Plan has been adjusted in response to this comment. This guideline has been retained, but the intent has been clarified as suggested in the comment. The guideline now clearly states that its intent is to maximize the retention of National Forest System lands in the Sedona-Oak Creek management areas when disposal of national forest lands is being considered to resolve encroachment issues or provide lands needed for public purposes. See MA-RedRock-G-9, MA-OakCrk-G-14, MA-SedN-G-6, and MA-HouseMtn-G-7.

Commenter: O'Halleran, Tom

Comment:

Motorized Recreation. Reference: p.137 MA-SedOak-G7 Plan Language: Vehicle crossings of Dry Creek should be prohibited unless appropriate water quality protection measures can be implemented Issue: If there is concern about negative impact on water quality by vehicular crossing of Dry Creek, vehicle crossing should not be permitted at all. Alternative: This should be a standard rather than a guideline. Alternate language for a new standard: Because of concern for water quality, vehicular crossings of Dry Creek shall be prohibited and indicated by appropriate signage at the relevant locations. In addition, motorized travel maps and travel guides issued by the CNFS will mention such prohibition for the Dry Creek Area with educational text about the lasting damage vehicles can cause when crossing dry or wet streambeds.

Response:

The guideline has been modified in response to your comment. to remove low clearance vehicle portion for Schnebly and Dry Creek Roads.

Comment:

Recreation Special Uses. Reference: FW-SpecUse-O-1 (p. 99) Plan Language: Identify 4 pre-approved sites for recreation events and large group gatherings within 10 years of plan approval. Issue: Such sites might not be appropriate for Special Designation areas and hence may not apply to Sedona/Oak Creek Management Area. No information is given regarding by what process (e.g., will there be public input?) and criteria to determine whether such sites were or will be pre-approved. Nor does it identify any pre-approved sites or, if not known yet, in what regions they would be located. The following issues should also be considered and addressed in the objective: Could sites be close to one another? Would sites include parking, transportation, and other infrastructures to be built? Will the sites need drinking water (well, pipeline, water quality testing for drinking water required?) or a waste water treatment facility? Alternative: Provide transparency about the process of identifying such sites, about the infrastructure required, how they would be used or what they would be used for, who the potential users would be, and how the public will be involved in their identification and selection. For Special Designation areas, exclusionary guidelines should be added, i.e. none should be located in the Sedona Oak Creek MA.

Response:

This objective has not been adjusted in response to this comment. This objective falls in the category of recreation special uses and represents just one of the expected outcomes or actions required to accomplish movement toward desired conditions. However, this objective is not a decision to identify any particular pre-approved site. Recreation events and large group gatherings would occur under a recreation special use permit. Plan components guide these activities and an evaluation process is already required by law, regulation, and policy, so there is no need to repeat it in the Forest Plan. The specific questions in the comment would be addressed during that process based on the specific proposal being considered and the permit would need to be consistent with the direction in the Forest Plan. Some of the plan components that address recreation special uses follow. Authorized activities would be consistent with the Recreation Opportunity Spectrum settings and associated motor vehicle uses would occur on specifically authorized roads. See FW-SpecUse-DC-1, G-17. Recreation special uses would be consistent with site specific direction for other forest resources and community goals; resource impacts would be confined and localized; uses would generally be in areas that that compatible with use by the general public and the maximum group-size capacities and activities would be identified for each site. See FW-SpecUse - DC-2, 3 and G-1. Permit holders are required to rehabilitate unplanned user-created trails and other impacted areas created by their activities that were not authorized. See FW-SpecUse-S-2. Plan guidelines should further reduce resource impacts and social conflicts. For example, all special use activities should occur during times, in ways, and in locations that are consistent with the needs of national forest users yet address disturbance and safety concerns for area residents. Permits should not be issued for activities that are proposed to occur in sensitive resource areas or within 200 feet of perennial streams, springs or waters that support Federally listed or Southwestern Region sensitive species however exceptions may be made for hardened sites, water dependent activities, or safety. See FW-SpecUse-G-2, 3, 18, 19, and 21. Forestwide direction does not specifically restrict recreation events and large group gatherings in the Sedona-Oak Creek area but there is specific management area guidance. For example, standards in the Red Rock Management Area would allow four-wheel drive use along the Casner Powerline access through a special use permit that would be consistent with ROS goals, adjacent wilderness, wildlife objectives, soil protection and where use does not interfere with APS powerline access needs. However commercial tours are not permitted on this road, and four wheel groups are not allowed to camp along the Casner Powerline Road between the two gates. In addition, new outfitter-guide permits would not be authorized in this management area in areas that are at or approaching capacity. See MA-RedRock-S-2, 3, 4, and 5. In addition there are limitations on horse and pack stock on the five trails in the Red Rock-Secret Mountain Wilderness. See MA-RedRock-S-9 and MA-OakCrk-S-6.

Commenter: O'Halleran, Tom

Comment:

High Priority Parcels. Reference: MA-SedOak-S-8, p. 136. Plan language: "High-priority private parcels total approximately 95 acres (see Appendix A in the proposed plan, map 13, p. 229). High-priority land acquisition parcels include: Lincoln Canyon (25 acres) and Hancock Ranch (70.3 acres)." Issue: (a) according to total acreage of 95 acres, Lincoln Canyon and Hancock Ranch are the only high-priority parcels ('include' is inappropriate verb). (b) inconsistency: Cockscomb area is indicated as High-priority Acquisition Land on Map 13, p. 229, but not in text. Alternative: If Map 13 is incorrect, then just replace "include:" with "are" and eliminate Cockscomb area as High Priority Acquisition Land from Map 13. If Map 13 is correct, change wording and acreage accordingly in text.

Response:

The Forest Plan has been adjusted in response to this comment. The Cockscomb area has been removed from the map that identifies the base-for-exchange priority acquisition lands.

Draft

Comment:

Aircraft. Reference: FW-SpecUse-S (Plan page 99, #1); FW-SpecUse-G (Plan page 100, #8) Plan Language: Standard: "Prohibit motorized aircraft landings and takeoffs [on NFS land]. Guideline: "Aircraft activities related to commercial filming should be restricted..." Issues: These are too weak. They do not address helicopter traffic and do not discuss low-flying planes/helicopters. The Guideline is limited to commercial filming rather than other potential activities in the air. Noise and disturbances from frequent and low-flying aircraft has been an increasing problem to those seeking to enjoy wilderness hiking and camping. Alternatives: There should be specific directions on limitations of scenic/tour flights by planes or helicopters. These should include frequency, noise and location (height and place). While KSB believes that these should be forest- wide, they should at least apply to the Sedona/Oak Creek Management Area. There may need to be coordination with the FAA but that, too, should be spelled out in the standard and guideline. Restrictions related to wilderness areas should be drafted as standards. While KSB thinks restrictions related to other areas of the forest should also be standards, guidelines may be more appropriate for non-wilderness areas.

Response:

Management of aircraft in flight is generally outside the scope of the Forest Plan; the Forest has no authority to limit or manage aircraft or helicopters that do not take off from or land on the Forest unless the flight involves some other activity permitted by the Forest Service, such as filming. With this in mind, the Forest Plan includes numerous components that address the potential impacts associated with low flying airplanes and helicopters. The Special Uses standard (prohibiting motorized aircraft landings and takeoffs on the Forest) and guideline (restricting commercial filming by aircraft in the Sedona/Oak Creek area) have been retained. See FW-SpecUse-S-1 and FW-SpecUse-G-13. The inclusion of these components in the Special Uses section gives them forestwide application. The guidelines related to use of aircraft for commercial filming near Sedona and Oak Creek have been retained in the direction for the relevant management areas. See MA-RedRock-G-3, MA-OakCrk-G-11, and MA-SedN-G-4. Management approaches in the Sedona area MAs addresses collaboration with FAA. In a more general manner, the concept of natural soundscapes has been addressed in a forestwide All Recreation desired condition. See FW-Rec-All-DC-10. This component expresses a desire that natural soundscapes are consistent with the Recreation Opportunity Spectrum objectives for an area. Finally, a management approach has been added to the Designated Wilderness section reminding forest managers to collaborate with the Federal Aviation Administration and others to minimize disturbances caused by aircraft over designated Wilderness areas. It states: Collaborate with Federal Aviation Administration, airport administrations, air tour operators, military and government agencies, and other aircraft operators to minimize disturbances caused by aircraft over designated Wilderness areas of the Coconino National Forest. Aircraft disturbances include, but are not limited to, diminishing solitude and primitive recreation opportunities and disruption to key wildlife areas during important times of their life cycle. Examples could include peregrine falcon nesting sites and big game wintering habitat. Encourage aircraft operators to adhere to Federal Aviation Administration's Notice to Airmen regarding minimum altitudes over wilderness.

Commenter: O'Halleran, Tom

Comment:

Special Uses. Reference: MA-SedOak-DC 25, p. 134 Plan Language: "... motorized tours, do not impact the ability of other forest users to have these experiences. Issue: after motorized tours - add: including airplanes or helicopters Alternative: after motorized tours - add: including airplanes or helicopters

Response:

Specific references to airplanes and helicopters have not been added as suggested. The Forest has limited jurisdiction over airplanes and helicopters that are flying over the Forest. However, the general concerns about airplanes and helicopters are addressed in the broader, strategic language in several plan components. The Sedona-Oak Creek Management Area desired condition addressing motorized tours contained attributes that have forestwide relevance, so this direction was moved into other forestwide direction. For example, guidelines in the forestwide Special Uses section require special uses to be designed to maintain or move toward desired conditions for other uses and resources and occur during times, in ways, and in locations that are consistent with the needs of national forest users to reduce social conflicts. See FW-SpecUse-G-1 and 2. The All Recreation section has a desired condition for recreation opportunities to be balanced with the capacity of forest resources to support them and for recreation settings to be stable and retain their natural character. See FW-Rec-All-DC-6. Another All Recreation desired condition seeks to provide opportunities for experiencing solitude and natural soundscapes that are consistent with ROS objectives. See FW-Rec-All-DC-10. Special Use desired conditions also touch this topic by noting that recreation special use activities should not draw attention to the equipment and are consistent with site specific direction for other forest resources and community goals. See FW-SpecUse-DC-7 and 8. Finally, a management approach has been added to the Designated Wilderness Areas section to remind forest managers to: Collaborate with Federal Aviation Administration, airport administrations, air tour operators, military and government agencies, and other aircraft operators to minimize disturbances caused by aircraft over designated Wilderness areas of the Coconino National Forest. Aircraft disturbances include, but are not limited to, diminishing solitude and primitive recreation opportunities and disruption to key wildlife areas during important times of their life cycle. Examples could include peregrine falcon nesting sites and big game wintering habitat. Encourage aircraft operators to adhere to Federal Aviation Administration's Notice to Airmen regarding minimum altitudes over wilderness.

Commenter: O'Halleran, Tom

Comment:

Dispersed Recreation. Reference: MA-SedOak-DC, #24, p. 134 Plan Language: "New outfitter-guide permits are issued for activities that have demonstrated public need, promote transportation services or public safety, or substantially increase protection of cultural or natural resources ..." Issue: Emphasis should be on protection. Don't make it an option/choice (i.e. "or"). Alternative: 1) End sentence with "public safety." 2) Add sentence: "Any new permit should maintain or increase the protection of cultural and natural resources."

Response:

The plan component has been adjusted as suggested in the comment. The plan component has been adjusted to ensure the protection of cultural and natural resources. See FW-SpecUse-G-16. Because the plan component was worded more in the form of a guideline (describing sideboards that guide management) and because this plan component addresses forestwide management concerns, it was slightly reworded and placed with the other guidelines in the Special Uses section.

Commenter: O'Halleran, Tom

Comment:

Road Access. Reference: MA-SedOak-DC (#22) Language: -There are some inconsistencies in social encounters and road access that are recognized and expected to continue: * Future development of State Highway 179 * The level of use on the main four-wheel drive road [at Broken Arrow] is higher than generally desired for semiprivate motorized areas Issue: This is not a Desired Condition, but rather an acknowledgment of a problem with the forest. A Desired Condition should not state that it expects an inconsistency to continue. If the level of use of the Broken Arrow trail is higher than desired, then steps should be taken to reduce the usage - not to say that it will continue. Alternative: If the Draft Plan wants to note these "inconsistencies" then it should also state that the goal (i.e. Desired Condition) is to improve upon the current situation and eliminate the problem. There also are no plans to develop Rt. 179 beyond its current state, so this should be deleted. In addition, there should be objective(s) added to reach the desired condition within a specified timeframe.

Response:

This desired condition has been adjusted in response to this comment. Because management related to Recreation Opportunity Spectrum (ROS) settings is an issue that applies to the whole forest, some of this direction has been moved into the forestwide All Recreation section. See FW-Rec-All-DC-4. This desired condition has been adjusted to remove the recognition that there may be inconsistencies with the desired condition in certain areas. The desired condition states that ROS settings provide the general context for social encounters and access in particular locations, but acknowledges that localized areas within a particular setting may be different from the overall setting. In addition to this forestwide direction, all four of the Sedona-Oak Creek management areas include a desired condition for social encounters to be consistent with ROS settings. A guideline in the Red Rock Management Area specifically addresses conditions in Broken Arrow Basin. See MA-RedRock- G-5: The parking, staging areas, and main four-wheel drive road at Broken Arrow Basin should be managed for the ROS setting of 'rural' because of the area's high level of use. The physical setting and maintenance level of the road should be managed as semi-primitive motorized to be consistent with the surrounding area. The reference to anticipated development of State Routes 179 and 89A have already occurred, so that direction has been removed from the Forest Plan.

Commenter: O'Halleran, Tom

Comment:

Trails. Reference: MA-SedOak-DC (#14) Language: Unneeded nonsystem trails are discouraged. Trails that duplicate system trails or cause damage . . . are rehabilitated. A network of primarily nonmotorized trails provides opportunities at multiple development levels for hikers, OHV recreationists . . . Issue: The desired condition should be the elimination of unneeded nonsystem trails - not just discouragement. Trails should be rehabilitated as soon as possible. The OHV reference should be eliminated since the sentence discusses nonmotorized trails. Alternatives: Unneeded nonsystem trails are prohibited or eliminated. Trails that duplicate are rehabilitated as soon as possible. Delete: "OHV recreationists"

Response:

The Forest Plan has been adjusted in response to this comment. The direction to discourage unneeded nonsystem trails has been strengthened to require that unplanned, user-created trails be managed to prevent future access. See FW-Rec-Trails-G-3. This guideline also addresses resource damage and requires rehabilitation to accelerate recovery and to prevent further resource impacts. This guideline has been moved into the Trails section to expand its applicability from the management area to the entire forest.

Commenter: O'Halleran, Tom

Comment:

Scenery. Reference: MA-SedOak-DC-9, p. 132 Plan Language: The unique geology and local rock formations of Red Rock Country make it a multicultural landscape that has been recognized for centuries. Issue: Text duplication. Part of that sentence is repeated verbatim in the next sentence. Alternative: Delete the entire sentence because the next sentence better expresses the intent.

Response:

The Forest Plan has been adjusted in response to this comment. The duplicate sentence has been deleted. The remaining language in this desired condition, as with scenery descriptions in other management areas, has been moved to the Landscape Character Description. For scenery desired conditions for this management area, see the Red Rock Landscape Character Zone in the document titled Landscape Character Descriptions, Coconino National Forest in the project record and on the forest website. See MA-RedRock-DC-10.

Commenter: O'Halleran, Tom

Comment:

Scenic Resources. Reference: FW-Scenic-G #6, p. 115 Plan Language: ... the evidence of these activities should be restored following completion of the activity to harmonize with the surrounding landscape. Issue: There needs to be a time limit for the following completion of activity. Alternative: The area will be restored as soon as reasonably possible after the completion of the project.

Response:

The Forest Plan has been adjusted in response to this comment. The Scenic Resources guideline has been adjusted to require evidence of management activities in view of Concern Level 1 and 2 travel routes to be restored in a timely manner following completion of the activity to harmonize with the surrounding landscape. See FW-Scenic-G-3.

Comment:

Special Uses. Reference: FW-SpecUse-DC, Land Special Uses, page 98, #3 Plan Language: (The last sentence) Power lines and towers are built (construction or reconstruction) to specifications compatible with raptor use. Issue: This language does not state that the power lines should be buried unless there are overriding environmental or technical concerns that would prevent burial. Alternative: The last sentence should read: "Power lines and towers are built (construction or reconstruction) to specifications compatible with raptor use. The power lines should be buried unless there are overriding environmental or technical concerns that would prevent burial."

Response:

Several plan components have been modified to address these concerns. This desired condition in the forestwide Special Uses section that addresses the impacts of utility and energy transmission corridors on the forest has been modified to address this concern and clarify its overall intent. Some commenters expressed concern with what appeared to be a general requirement to bury all infrastructure within these corridors, which can raise economic and environmental concerns. Other commenters expressed support for burying all infrastructure in these corridors and asked that vegetation clearing for these corridors be kept to a minimum. After considering all of these comments, the desired condition was adjusted to make it clear that its goal is for this type of infrastructure to not be visible across the landscape, rather than defaulting to burying it. The desired condition has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this type of infrastructure. See FW-SpecUse-DC-3. The corresponding guideline in the Special Uses section that addresses burial of utility lines has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this utility lines. See FW-SpecUse-G-9. With regard to vegetation management, a Special Use desired condition was adjusted to acknowledge that there are legal mandates associated with the vegetation clearing for these corridors and it is a desired condition to meet those legal mandates. See FW-SpecUse-DC-2. While this desired condition recognizes that there is a level of vegetation clearing that is necessary for the safe operation of these corridors, it also recognizes the desire of moving towards other desired conditions applicable to the area. This includes the desired conditions for scenery. To support this desired condition, the forestwide Special Uses section has retained a guideline that requires the retention of vegetation that does not need to be cleared to meet legal mandates to allow screening for scenery, habitat for species, and corridors for wildlife movement. See FW-SpcUse-G-6. Concerns about co-locating infrastructure in an existing corridor before a new corridor is considered were addressed in several plan components in the forestwide Special Uses and Scenery sections. To consolidate this direction in one plan component, the guideline in the forestwide Scenery section that was designed to prevent the widening of utility rights-of-way in areas that have a moderate scenic integrity objective was merged with a similar direction in the forestwide Special Uses section. See FW-SpecUse-DC-3. Whether the additional infrastructure should be buried is addressed by the plan components discussed above.

Comment:

Special Uses. Reference: FW-SpecUse-DC, Land Special Uses, page 97, #2 Plan Language: Utility lines, such as pipelines, power lines, fiber optic lines, and telephone lines, are buried unless there are overriding environmental or technical concerns that would prevent burial. Vegetative clearing for utility and energy transmission corridors provide an aesthetic edge effect. The location of new, large linear infrastructure such as power lines has minimal effects to wildlife and minimizes habitat fragmentation. Issue: We strongly support the first sentence above. The second sentence above does not ensure that scenic integrity is preserved... "Vegetative clearing for utility and energy transmission corridors provide an aesthetic edge effect." Alternative to second sentence: Minimize vegetative clearing for utility and energy transmission corridors to enhance natural features and beauty and preserve scenic integrity.

Response:

Several plan components have been modified to address these concerns. This desired condition in the forestwide Special Uses section that addresses the impacts of utility and energy transmission corridors on the forest has been modified to address this concern and clarify its overall intent. Some commenters expressed concern with what appeared to be a general requirement to bury all infrastructure within these corridors, which can raise economic and environmental concerns. Other commenters expressed support for burying all infrastructure in these corridors and asked that vegetation clearing for these corridors be kept to a minimum. After considering all of these comments, the desired condition was adjusted to make it clear that its goal is for this type of infrastructure to not be visible across the landscape, rather than defaulting to burying it. The desired condition has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this type of infrastructure. See FW-SpecUse-DC-3. The corresponding guideline in the Special Uses section that addresses burial of utility lines has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this utility lines. See FW-SpecUse-G-9. With regard to vegetation management, a Special Use desired condition was adjusted to acknowledge that there are legal mandates associated with the vegetation clearing for these corridors and it is a desired condition to meet those legal mandates. See FW-SpecUse-DC-2. While this desired condition recognizes that there is a level of vegetation clearing that is necessary for the safe operation of these corridors, it also recognizes the desire of moving towards other desired conditions applicable to the area. This includes the desired conditions for scenery. To support this desired condition, the forestwide Special Uses section has retained a guideline that requires the retention of vegetation that does not need to be cleared to meet legal mandates to allow screening for scenery, habitat for species, and corridors for wildlife movement. See FW-SpecUse-G-6. Concerns about co-locating infrastructure in an existing corridor before a new corridor is considered were addressed in several plan components in the forestwide Special Uses and Scenery sections. To consolidate this direction in one plan component, the guideline in the forestwide Scenery section that was designed to prevent the widening of utility rights-of-way in areas that have a moderate scenic integrity objective was merged with a similar direction in the forestwide Special Uses section. See FW-SpecUse-DC-3. Whether the additional infrastructure should be buried is addressed by the plan components discussed above.

Commenter: O'Halleran, Tom

Comment:

Dispersed Recreation. Reference: FW-Rec-Dis-G, page 108, #10 Plan Language: Except in the Long Valley MA, dispersed camping should be provided near but not within 200 feet of riparian, shoreline, or aquatic resources (per Leave No Trace principles) to provide overnight dispersed recreation opportunities. Issue: There is no Management Approach to educate campers about no dispersed camping within 200 feet of riparian, shoreline, or aquatic resources. Alternative: Add Management Approach: Coordinate with the recreational outfitters, forest visitors, Arizona Game & Fish Department, Arizona State Parks and National Park Service to educate forest visitors and dispersed campers not to camp within 200 feet of riparian, shoreline, or aquatic resources (per Leave No Trace principles).

Response:

This guideline has been removed from the Plan because it already covered by more strategic forest wide direction. See FW-Rec-All-G-2 and FW-Rec-Disp-G-5. Neither of these guidelines identifies a specific distance limitation for dispersed camping. In its place, another guideline was crafted from language that was contained in a Long Valley Management Area desired condition. See FW-LongV-G-1. Strategic direction related to educating forest users about impacts from dispersed recreation (which would include dispersed camping near riparian areas) has been grouped into the Interpretation and Education section. See desired conditions, guidelines, and management approaches in FW-InterpEd.

Commenter: O'Halleran, Tom

Comment:

Interpretation and Education. Reference: FW-Rec-Disp-DC, p. 104, #8 Plan Language: Forest Service communications.....There is little human litter as a result of effective enforcement, patrols, and use of refuse and recycling facilities.....to practice careful stewardship. Issue: We support this Desired Condition, but a Management Approach for Interpretation and Education should be added to educate forest visitors of the importance of not littering. Alternative: Add Management Approach: Provide leadership to educate the recreational outfitters and forest visitors the importance of no human litter and to be aware of "Leave No Trace principles".

Response:

A management approach has been added to the Interpretation and Education section. It addresses the concern related to littering by invoking tools like Leave No Trace and Tread Lightly as follows: Share Leave No Trace and Tread Lightly concepts and practices in forest interpretation and visitor education.

Commenter: O'Halleran, Tom

Comment:

Dispersed Recreation. Reference: FW-Rec-Disp-DC Motorized Recreation, p. 104, #6 Plan Language: Adequate signage is provided to advise the public of where motorized vehicles are permitted. Information kiosks are located at main entry ways onto the forest with pertinent motorized recreation information. Information is provided for OHV recreationist and trail users, including maps and signs that provide road and trail information and explain national forest regulations for such activities as OHV travel and camping and trail opportunities. Orientation information and interpretation is provided at sites that receive high levels of visitation. Issue: We support this Desired Conditions, but a Management Approach for Dispersed Recreation should be added to educate forest visitors and specify on which trails motorized vehicles are permitted. Alternatives: Add Management Approach: Provide leadership to educate the recreational outfitters and forest visitors on which trails motorized vehicles are permitted and on which trails motorized vehicles are not permitted.

Response:

In addition to the desired awareness of travel restrictions included in FW-RdsFac-DC-3, the Forest Plan includes several other components that address this comment. One of the guidelines in the Roads and Facilities section has been expanded to require signage that facilitates navigation of designated motorized routes and prevents motorized use outside of designated areas and routes. See FW-RdsFac-G-3. Additional direction is located in the Interpretation and Education section. A desired condition in this section creates an express goal to provide forest visitors with properly placed, clear signs and information on authorized motorized use and restrictions. See FW-InterpEd-DC-5. A guideline in this section directs designated trail uses (e.g. motorized, mechanized, equestrian, etc.) to be identified at trailheads to reduce user conflicts, and impacts to trails and associated resources. See FW-InterpEd-G-3. Finally, a management approach is included in the Interpretation and Education section to remind forest managers to work with others to establish interpretive messages and programs for designated motorized routes and areas. It states: Work with agencies, motorized recreation user groups, and other stakeholders to establish interpretive messages and programs for designated motorized routes and areas. These efforts may include improved signs, information kiosks, and other interpretive tools. Interpretive themes may include messages to foster conservation ethics, to prevent lost riders, to show opportunities of where to ride, to identify dangerous and/or closed areas, to teach riding ethics, and to reduce user conflicts.

Commenter: O'Halleran, Tom

Comment:

Scenery. Reference: p. 137 - MA-SedOak-G-2 Plan Language: The scenic integrity objective for public utilities should be no less than moderate when viewed from Concern Level 1 and 2 travelways. Issue: SIO level is set too low. More than 50% of the Sedona/Oak Creek MA has an SIO of High or Very High, and travelways in these areas hence are Concern Level 1 routes, i.e., visitors have a high interest in scenic quality. Alternative: replace "no less than moderate" with "no less than high".

Response:

The guideline that generated this comment has been removed from the Forest Plan. Desired scenic integrity objectives have already been set for the Forest. The process for identifying scenic integrity objectives took the ability to view an area from Concern Level 1 and 2 routes into consideration. However, the activities that are required for the development and operation of a public utility will not meet the definition of high scenic integrity, which relies upon the landscape character appearing natural or unaltered. For example, legal mandates require vegetation clearing within utility corridors. This type vegetation management will not meet the requirements for high scenic integrity.

Comment:

The public also does not have any indication on plan progress based on monitoring or what the baseline was in 1987 and if progress has been made since. The impacts to the forest through increased visitation and regional population expansion can have a dramatic impact on the ability of the CNF to reach desired conditions or maintain the forest. There is a need for a transparent process to facilitate information to the public. Therefore, the Draft Plan should: * Develop a public notification and reporting process to identify desired conditions progress based on monitoring. * Identify in the Draft Plan the monitoring strategy baseline conditions in 1987 and how they relate to currently recommended desired conditions. Explain whether the progress against the desired condition has been made since 1987 or whether we are on a declining path. * Publish a yearly monitoring report inclusive of all activities for desired conditions, species protection, and those required by forest regulation and statute. * Establish a guideline that requires public disclosure of the forest supervisor's annual review of monitoring program along with any management decisions affecting desired conditions. Also identify if changing conditions in the forest requires a change in management direction. These public disclosures should be broad announcements that new information is now available on the website and specifying that information.

Response:

As suggested by the Introduction to the Monitoring Strategy section, an evaluation report is prepared annually for the Forest Supervisor. The evaluation report documents how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. The Forest Supervisor uses the evaluation report as a tool to determine if any changes are needed in management actions or the Forest Plan itself. The evaluation report is posted on the Forest's website and available for public review. The Introduction to the Monitoring Strategy section has been updated to confirm that the public will be given timely, accurate information about forest plan implementation. This is done through the release of the annual monitoring and evaluation report. The Forest Plan does not develop a particular process for public notification of this report. Currently, the Forest posts these reports to the Forest's website as they become available. If the Forest Supervisor decides that management actions or the Forest Plan itself may need to be changed, specific proposals will be developed at that time. Proposals to change management actions or the Forest Plan would need to be consistent with the National Environmental Policy Act (NEPA), the Forest Service Handbook and Forest Service Manual, and include analysis and opportunity for public involvement. The public involvement process would depend on the specific proposal. In preparation for plan revision, the Coconino NF identified guidance in the 1987 plan which is working, new conditions which need to be addressed, and ongoing challenges which could be better addressed. This preparatory work is documented in the "Analysis of the Management Situation," which was completed in May 2010 (USDA Forest Service 2010a). Through the "Analysis of the Management Situation," the Coconino NF identified current ecological and socioeconomic conditions and trends taking place on the forest and the associated "needs for change" to be addressed in the revised plan. The needs for change are grouped under three broad revision topics: (1) recreation, (2) forest community interaction, and (3) maintenance and improvement of ecosystem health.

Comment:

Railroad Draw: * Helps protect and preserve what has been called Arizona's second Grand Canyon, Sycamore Canyon. * Part of Sycamore Canyon drainage area helping with water quality and quantity. * Habitat for Mexican spotted owl, bald eagles and riparian species. Important for future generations. Given Arizona's history on riparian habitat preservation, the placement of this area into wilderness will help future riparian species. * Evaluation Report identifies area as High for Capability. * Low availability rating is outweighed by the importance to preserve the ecosystem of Sycamore Canyon, the high capacity rating and moderate need rating. * Selection would also help with the low inventory of wilderness lands in the Flagstaff region.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismarck, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for

determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

The Draft Plan does not address visitor use or evaluate control measures for wilderness areas as required by 36 C.F.R. Section 219.18 (1982). KSB suggests the Forest Service consider adding objectives, standards, or guidelines for each wilderness area, as needed, to conform with Section 219.18.

Response:

The Forest Plan contains direction on address visitor use and consider control measures in wilderness areas. As part of the reorganization of the Forest Plan, all plan components associated with designated wilderness areas have been grouped into a section in Chapter 3 of the Forest Plan entitled Designated Wilderness Areas. Many of the plan components are designed to apply to each and every designated wilderness area, but some components indicate that they apply to a particular designated wilderness area. The Designated Wilderness Areas section includes standards that limit group sizes in all wilderness areas to 12 persons and stock animals and restrict commercial and organizational group activities to those activities that promote wilderness values. See SA-Wild-S-1 and 2. Several guidelines in this section also address visitor use. Permitted uses are to be designed to maintain or move towards the desired conditions for wilderness. See SA-Wild-G-1. Large group activities should not occur in wilderness areas in order to maintain visitor experiences consistent with Wilderness Opportunity Spectrum settings (such as solitude). See SA-Wild-G-3. The guidelines also indicate that use levels should be managed through permit systems or other methods when necessary to prevent wilderness values and opportunities from being compromised. See SA-Wild-G-2. Management approaches in the Designated Wilderness Areas section remind forest managers to: Closely monitor wilderness areas for overuse and unacceptable resource damages to identify when onsite management is needed. Use levels may be determined by limits of acceptable change studies, range analyses, code-a-site inventories, or professional judgment. In addition to these components that apply to all designated wilderness areas, the Forest Plan contains direction that addresses concerns in particular wilderness areas. Standards in this section prohibit off trail travel during snow free period, over night camping, and use of recreational livestock use such as horses, pack stock, mules, or llamas in the Alpine Tundra ERU portion of the Kachina Peaks Wilderness. See SA-Wild-S-3 and 4. Guidelines in this section indicate steps to take to discourage and reduce off trail travel to protect alpine tundra vegetation in the Kachina Peaks Wilderness and to prevent motor vehicle intrusions into the Strawberry Crater Wilderness. See SA-Wild-G-9 and 10. Wildfire, insect, and disease control measures are addressed through forestwide direction. A desired condition for wildland fires, wherever they may occur on the Forest, is to burn within the historic fire regime of the vegetation communities affected. High-severity fires occur where this is part of the historical fire regime and do not burn at the landscape scale. See FW-Fire-DC-2. Other desired conditions acknowledge that insects and disease can be agents of natural levels of disturbance in ecosystems. These desired conditions apply in designated wilderness areas as well as the rest of the Forest. For examples, an All Ecosystems desired conditions seeks ecosystem conditions that promote endemic levels of disease. See FW-Eco-DC-4. Likewise, a Geological Features desired conditions seeks disease in caves and karst to be within natural levels. See FW-BioPhys-Geo-DC-3. Many of the Terrestrial Ecological Response Units included similar desired conditions for natural levels of disturbance, including insects and disease. See FW-TerrERUAspMpl-DC-2, FW-TerrERU-PP-DC-2, FW-TerrERU-MC-MCFF-DC-4, FW-TerrERU-MC-MCA-DC-4, and FW-TerrERU-SF-DC-1. A Springs guideline requires projects and activities to be designed to prevent the introduction or spread of disease, invasive, or undesirable species. See FW-Springs-G-3.

Commenter: O'Halleran, Tom

Comment:

The permanent preservation of open space, especially wilderness areas, helps provide for the protection of critical Arizona watersheds. This will be especially true given the explosive growth Arizona will be experiencing.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

All of KSB's additional wilderness recommendations have been evaluated as either high or medium except for Railroad Draw, which is low for availability. Evaluation Report Table 1 at 8.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. 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These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. 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compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

As the nearby Phoenix metropolitan area expands, the demand for day use of the forest will only increase. If the additional alternatives are not protected, it could result in their having lower evaluations in the future on capability, availability and need. In other words, if we do not adequately analyze these alternatives now, they may later become unsuitable for wilderness designation and, with that, we would lose important opportunities to meet desired conditions relating to people being able to use wilderness areas, as well as other desired conditions relating to protecting water and habitat for endangered, critical, or sensitive species.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for

determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

As identified in the Potential Wilderness Area Evaluation Report, a number of the wilderness areas considered under Alternative C currently have Off Highway Vehicle (OHV) access that could impact the desired conditions for water quality. The Draft Plan currently highlights the need to improve total maximum daily loads (TMDLs) into surface water, but it does not seem to adequately address how TMDLs will be improved.

Response:

A guideline in the Watersheds and Water section has been adjusted to address these comments. The word "considered" has been replaced with "implemented." See FW-Water-G-5. The Forest Plan establishes a framework and strategy for management activities but generally does not prescribe specific approaches, such as how to implement a TMDL. Implementation would be worked out at the project level. There are several management approaches related to TMDLs to provide input and recommend strategies for, and to implement existing TMDLs in Watersheds and Water, and Stream Ecosystems. These management approaches remind forest managers to: Provide input and recommend strategies for implementation plans as required by Arizona Revised Statute 49-234 for existing TMDLs to provide strategies to reduce existing pollutant loads identified in TMDLs and to be in compliance with applicable water quality standards for impaired waters. Coordinate with the Arizona Department of Environmental Quality to monitor and achieve acceptable total maximum daily loads (TMDLs) suspended sediment concentration in the Verde River.

Comment:

The CNF contains important surface and groundwater resources that should be preserved. Many of the alternatives are within the same groundwater and surface water basins as current wilderness areas. Their inclusion into the wilderness system will help maintain the character of current wilderness areas and help with preservation of water resources.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest

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Commenter: O'Halleran, Tom

Comment:

The identified need for additional wilderness does not appear to be met by inclusion of only an additional 14,983 acres of wilderness.

Response:

Need is one factor considered when evaluated potential wilderness areas, but no wilderness recommendation is based solely on the evaluation of need. Potential wilderness were also evaluated for availability and capability. For more information on how recommended wilderness areas were selected, see the response on the rationale for selecting the recommended wilderness areas included in the Forest Plan.

Commenter: O'Halleran, Tom

Comment:

While the Draft Plan and DEIS identify a concern for population growth, they do not (but should) identify the magnitude of growth and impacts on the forest.

Response:

The revised Plan was developed with the recognition that there may be increased use of the Forest associated with anticipated population growth. The revised Plan puts a heavy emphasis on the desired conditions of natural resources. Recreation and other uses that may be associated with population growth are acknowledged as appropriate uses of the Forest, but are balanced against the capacity of forest resources to support them. See FW-Rec-All-DC-6. A guideline in the Recreation section ensures that the desired conditions of other resources are considered in recreation management decisions. Population growth could lead to other pressures on Forest resources in the form of demands for water or access. As with recreation, desired conditions guide the way for protection of important resources and guidelines ensure that those desired conditions are being maintained or moved towards. For examples, see FW-Water-G-3, FW-ConstWat-G-1, FW-Graz-G-2, FW-FProd-G-1, FW-Rds-Fac-G-1, and FW-SpecUse-G-1. In addition, interpretation and education should be adaptive and responsive to changes in population. See FW-InterpEd-DC-4.

Commenter: O'Halleran, Tom

Comment:

KSB believes that these two modifications to the Land Exchange provisions of the Draft Plan will provide desired conditions that will help carry out the intention of the plan and the wishes of the community to limit land exchanges and thereby preserve the intrinsic beauty of this area. The Forest Service should consider whether additional standards or guidelines would assist.

Response:

No change has been made in response to this comment. The forestwide and management area direction for land adjustments and scenic resources that is applicable for the Sedona-Oak Creek area has been reviewed. It provides a comprehensive framework that would guide any land adjustment proposal in this area. Much of the direction related to land adjustments has been carried forward from the current plan. Under the current plan, there have been very few land adjustments in the Sedona-Oak Creek area since 1998 when Amendment 12 was added to the plan. Under that direction, there has been one land exchange (7.50 acres acquired by the Forest and 8.43 acres disposed), two land sales (286.4 acres disposed by the Forest), and eight purchase (451.33 acres acquired by the Forest). This is a strong indicator that the direction in the Forest Plan is adequately limiting land exchanges and preserving the Forest's land base. The direction in the Forest Plan also adequately addresses the concern related to preserving the scenic resources in the Sedona-Oak Creek area. The guidelines for Land Adjustments indicate that the Forest should consider acquiring lands that contribute to areas of high or very high scenic integrity. See FW-LndAdj-G-1. Likewise, lands that have lost their wildland characteristics (an indication of reduced scenic integrity) are among those lands that should be considered when a land adjustment is being considered. See FW-LndAdj-G-2. These plan components will work together to ensure that scenic integrity is a factor when land adjustments are considered.

Comment:

Deadwood Draw: * Expansion and protection for the current Wet Beaver Creek Wilderness Area. * Additional protection for watershed. * Would lessen the amount of OHV's in area and help with TMDL mitigation and erosion. * Area would significantly enhance the wilderness characteristics and opportunities related to remoteness and solitude for adjacent wilderness Evaluation Report at 31. * Wet Beaver Creek watershed is one of most studied watersheds in Arizona and should be preserved. * Evaluation rating of High. Important preservation of primitive surroundings for Northern leopard frogs, Golden Eagle, four spotted skipperling, spotted bat, greater mastiff bat, Townsend's big -ear bat and Allen's lappet browed bat as well as potentially other species. Evaluation Report at 31. * Provides for improved heritage resource protection. (Forest Service 2011b) The area would promote wilderness recreation related to these values. Evaluation Report at 32. * Area is easily accessible from Interstate Highway 17 and would provide the increasing population of Arizona ready access to a high-quality wilderness experience. * Would help alleviate pressures on other wilderness areas within the CNF. * Evaluation Report Table 1 identifies a rating of High need. This should be considered when assessing future impacts to this area by continued OHV use, which will also have impacts on visitation, quality of experience, erosion and TMDL load.

Response:

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Commenter: O'Halleran, Tom

Comment:

Reference: MA-SedOak-S (pg. 136, DC #7): "General Description for Land Adjustment" (pg. 95). Language: In the Forestwide discussion (pg. 95) the general category is termed "Land Adjustments." Issue: This term is not defined in the Glossary. However it is discussed generally in the forestwide provisions. By its terms it is much broader than a "land exchange" and it also includes "sale, purchase, conveyance and right of way." The restrictions in the SedOak MA are limited to "Land Exchanges." The standard states: "Land exchanges that dispose of national forest land . . . will occur only if they result in acquisition of [land] in Sedona/Oak Creek MA." Draft Plan at 136 (DC #7) This language is too narrow in light of the broad interpretation given to "land adjustments." Alternative: a. Broaden the standard to include land adjustments of any type. Without this change in the Draft Plan language, land adjustments other than land exchanges will not have the appropriate limitations. b. Include a definition of Land Adjustment in the Glossary

Response:

The Forest Plan has been adjusted in response to this comment. A definition for the term "land adjustment" has been added to the Glossary. The definition acknowledges that land adjustments are the acquisition or disposal of National Forest System lands through the following processes: sale, purchase, exchange, conveyance, rights-of-way, interchange, and grants. The use of the term "land exchange" in the standards in the management areas that encompass the Sedona-Oak Creek area has been retained. See MA-RedRock-S-7, Ma-OakCrk-S-4, MA-SedN-S-4, and MA-HouseMtn-S-2. These standards were carried forward from the current plan for continuity of management on this topic.

Commenter: O'Halleran, Tom

Comment:

KSB agrees with the proposal for new wilderness areas at Strawberry Crater, Walker Mountain and Davey's.

Response:

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To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such

resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

The Draft Plan is based on the average budget over a five-year period. The five-year period used has seen major funding cuts to the forest budget. We have not been able to find anywhere in the Draft Plan the amount of funding that will be directed toward the monitoring program. There is neither a specific amount nor a set percentage. As such, the Draft Plan needs to incorporate the following: * State the Forest Service will develop budgets for projects that are needed to meet desired outcomes, objectives, and standards. This process can use a prioritization process to identify projects that need budgets. * Identify in the Draft Plan if funding for monitoring activities will be sufficient to meet the Draft Plan's identified desired conditions. * Notify the public of CNF funding for monitoring and forest maintenance.

Response:

The plan components, including the Monitoring Plan, were developed to be realistic and able to be implemented within anticipated future budgets (expected to be similar to current budgets). Chapter 1 of the Forest Plan acknowledges that objectives to achieve desired conditions are strongly influenced by recent trends, past experiences, and anticipated staffing levels and short term budgets. Chapter 5 of the Forest Plan acknowledges the uncertainties related to monitoring and evaluation relative to funding and prioritization as required by the National Forest Management Act: Monitoring and evaluation are identified, approved, and scheduled through the annual budget process. Actual budget levels, funding emphasis, and emergence of new issues may affect accomplishment of both management activities that make progress toward desired conditions as well as monitoring. Budgetary constraints may affect the level of monitoring that can be done in a particular fiscal year. If budget levels limit the Coconino NF's ability to perform all monitoring tasks, then those items specifically required by law are given the highest priority. Partnerships may be developed to accomplish monitoring and evaluation. The Socioeconomic Analysis section in Chapter 3 of the environmental impact statement describes the program costs for each alternative.

Comment:

The Draft Plan states: "The forest supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself." Draft Plan at 177. The evaluation considers questions such as those concerning what degree resource management activities are maintaining or making progress towards desired conditions and objectives. In addition, the evaluation addresses what modifications are needed for unanticipated conditions. There is no indication that these evaluations and changing management actions are made available to the public. At a minimum we feel the Draft Plan should identify a continuing role for the public in the following areas: * Develop a yearly report to the public on monitoring activities, changes in the monitoring plan, and current conditions on the forest. This element should include notification of the release of the report and public meetings. * Report the current status of attaining desired conditions. * Implement a process to address public involvement in the monitoring program. * Review yearly the proposed and allocated budget (with at least summary information about proposed and ongoing projects and monitoring) for CNF and how it affects attainment of desired conditions. * Develop of a formal public outreach program about each of the above. * Establish an electronic notification system that the public can opt into. While some of this may be addressed by current reports, not all of it is and the public outreach about such reports needs to be improved. The monitoring strategy has a baseline for current conditions, but there is no clear indication what the trend has been for forest conditions since the 1987 plan was approved. It would seem logical that the public should know what the trends are within the various affected environment categories. The public would then have a clearer understanding of the challenges the CNF is facing; if desired conditions are being achieved; and if they are not being achieved, what measures are needed to achieve them or whether they can ever be achieved.

Response:

As suggested by the Introduction to the Monitoring Strategy section, an evaluation report is prepared annually for the Forest Supervisor. The evaluation report documents how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. The Forest Supervisor uses the evaluation report as a tool to determine if any changes are needed in management actions or the Forest Plan itself. The evaluation report is posted on the Forest's website and available for public review. The Introduction to the Monitoring Strategy section has been updated to confirm that the public will be given timely, accurate information about forest plan implementation. This is done through the release of the annual monitoring and evaluation report. The Forest Plan does not develop a particular process for public notification of this report. Currently, the Forest posts these reports to the Forest's website as they become available. If the Forest Supervisor decides that management actions or the Forest Plan itself may need to be changed, specific proposals will be developed at that time. Proposals to change management actions or the Forest Plan would need to be consistent with the National Environmental Policy Act (NEPA), the Forest Service Handbook and Forest Service Manual, and include analysis and opportunity for public involvement. The public involvement process would depend on the specific proposal. In preparation for plan revision, the Coconino NF identified guidance in the 1987 plan which is working, new conditions which need to be addressed, and ongoing challenges which could be better addressed. This preparatory work is documented in the "Analysis of the Management Situation," which was completed in May 2010 (USDA Forest Service 2010a). Through the "Analysis of the Management Situation," the Coconino NF identified current ecological and socioeconomic conditions and trends taking place on the forest and the associated "needs for change" to be addressed in the revised plan. The needs for change are grouped under three broad revision topics: (1) recreation, (2) forest community interaction, and (3) maintenance and improvement of ecosystem health.

Comment:

It appears that the Draft Plan and related monitoring strategy are based on the CNF budgets over the last 5 years. The budget assumptions appear to conflict with the reality of the challenges the CNF is facing. A monitoring strategy based on appropriate funding is a necessary element for the Draft Plan's success. There does not appear to be any funding analysis within the Draft Plan, DEIS, or other cited reports that identifies the actual funding requirement for the forest to meet its desired conditions or, for that matter, to maintain and improve the ecosystem of the forest. Without such analysis, KSB believes the Forest Service cannot meet its regulatory requirements the 1982 planning rule. Without this important budgetary analysis, the Forest Service is in danger of not meeting its requirements under the Endangered Species Act and other laws that require monitoring or other planning activity. That appropriations may differ from what may be requested does not relieve the Forest Service of its duty to understand what it needs to meet its regulatory obligations. Moreover, under the 1982 regulations, budget proposals "shall be based on the plan." 36 § C.F.R. 219.10(e) (1982). If there are differences in the proposal and appropriated funds, the Forest Service can change proposed implementation schedules, though such changes are considered plan amendments. Id. (given that the changes to implementation schedules are considered plan amendments, this provision of the 1982 planning rule arguably is still effective and, even if not, emphasizes the point that there is and should be a difference between budget proposals and allocating funds and that both exercises are important). Without developing the budgets for the necessary work to meet desired conditions, objectives, and standards, the Forest Service is not communicating to Congress what the needs are. Without this information, Congress is unaware of the need. It of course will ultimately decide what portion of the national budget will be allotted to Forest Service work. But without the initial input, it will not have sound information upon which to make its decision. Without providing this information, the Forest Service may be contravening the requirements and intent of 16 U.S.C. Section 1606 and similar budgeting requirements. Also, this information should be used for the Strategic Plan required under the Government Performance and Results Act of 1993 (Results Act) (5 U.S.C. 306; 31 U.S.C. 1115 - 1119; 31 U.S.C. 9703 - 9704). See Forest Service Manual 1900-Planning (1900-2007-2) at 17-18 (eff. Oct. 12, 2007). Moreover, as a practical matter, without such a process with transparency, the American people cannot understand how its land should be managed if it were appropriately funded. Therefore the American people cannot communicate with members of Congress to get appropriate funding.

Response:

The plan components, including the Monitoring Plan, were developed to be realistic and able to be implemented within anticipated future budgets (expected to be similar to current budgets). Chapter 1 of the Forest Plan acknowledges that objectives to achieve desired conditions are strongly influenced by recent trends, past experiences, and anticipated staffing levels and short term budgets. Chapter 5 of the Forest Plan acknowledges the uncertainties related to monitoring and evaluation relative to funding and prioritization as required by the National Forest Management Act: Monitoring and evaluation are identified, approved, and scheduled through the annual budget process. Actual budget levels, funding emphasis, and emergence of new issues may affect accomplishment of both management activities that make progress toward desired conditions as well as monitoring. Budgetary constraints may affect the level of monitoring that can be done in a particular fiscal year. If budget levels limit the Coconino NF's ability to perform all monitoring tasks, then those items specifically required by law are given the highest priority. Partnerships may be developed to accomplish monitoring and evaluation. The Socioeconomic Analysis section in Chapter 3 of the environmental impact statement describes the program costs for each alternative.

Commenter: O'Halleran, Tom

Comment:

We need to know and understand what we can do today so in the long-term we are making the right decisions. An issue with desired conditions is that they are subjective and open to interpretation that will confuse the public and cause unnecessary conflict, particularly when objectives and standards, etc., are insufficient. This leaves a high degree of interpretation for future project decisions, which is untenable and not allowed under current laws.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

The 2009 Ecological Sustainability Report indicated that for areas in the Verde Valley and Sedona, soil and vegetative conditions have serious issues. For desert communities in the Verde Valley Region, it stated that the potential natural vegetation type (PNVT) has a trend that is unknown for vegetation structure and composition. It also identifies that the PNVT is considered highly departed from reference conditions. See 2009 Ecological Sustainability Report at 2-20. Also, desert community PNVT currently has mostly unsatisfactory soil conditions. The projected future condition and trend projects this type of soil to remain unsatisfactory with a static trend over the next couple of decades. Id. at 2-57. For semi-desert grasslands in the Sedona Region, this report states that: Under current management, the significant shift to shrubs and trees is likely to continue because continued lack of fire promotes the maintenance of woody vegetation. The presence of non-native annual grasses such as red brome could cause major changes in ecosystem integrity if not controlled. It states that the soil condition is projected to move slowly towards reference because of implementation of current grazing strategies, etc. The projected trend, however, would be static under drought conditions. See id. at 2-57. The DEIS finds that both soil condition and soil productivity are highly departed from desired conditions. DEIS at 105. Under Alternative B the desired conditions and objectives project that 3,500 acres would be treated and potentially improve the ability of soil to resist erosion, infiltrate water etc. For mixed broadleaf deciduous riparian forest in the Sedona and Oak Creek Canyon Region, the 2009 Ecological Sustainability Report, projects that this vegetative region is expected to move away from reference conditions. In addition there is a concern for non-native annual grasses and higher fire occurrence. See 2009 Ecological Sustainability Report at 2-23. Also, the report projects that the current trend is static and the departure from reference conditions is low. Id. at 2-58. It does not appear any of this scientific information was sufficiently incorporated into the Draft Plan, particularly as to objectives and standards to address these very serious concerns. All of this information is provided as an example to highlight that throughout the Draft Plan the desired conditions, objectives, standards, and planning tools taken together do not reflect or, importantly, address (particularly through objectives and standards) the best available science; do not provide for adequate planning; and do not meet the requirements of the 1982 planning rule. As such, the Draft Plan does not meet legal requirements, including requirements under the NFMA, ESA, and NEPA.

Response:

Desired conditions in the Forest Plan do not need an accompanying standard or guideline to be implemented. While it is true that projects and activities must meet the guidance in standards and guideline, projects and activities must also be consistent with the desired conditions in the Forest Plan. To demonstrate consistency with the desired conditions, a project or activity must be designed to Maintain or make progress toward one or more of the desired conditions of a plan without adversely affecting progress toward, or maintenance of, other desired conditions; or Be neutral with regard to progress toward plan desired conditions; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward other desired conditions in a negligible way over the long term. Objectives are not targets, but projections, and they may not be fully achieved based on a variety of factors. The objectives in the Forest Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. See the Plan Content and Guiding Future Projects, Program Plans, and Assessments sections in Chapter 1 of the Forest Plan for additional information on the need to be consistent with desired conditions.

Comment:

We find that many of the desired conditions in the Draft Plan are laudable goals. These alone, though, do not make an adequate plan. Unfortunately, the Draft Plan (throughout) lacks the other planning tools necessary to meet legal requirements (including the 1982 planning rule) and to be effective. An example of how the Draft Plan lacks sufficient integrated planning can be found in Chapter 2, Forest Wide Management, Desired Conditions for Soil. The FW-Soil-DC (1) states: "Soils function properly to distribute water and cycle nutrients to a variety of vegetation including lichens, mosses, grasses, forbs, shrubs, and trees." Draft Plan at 16. While this is a laudatory goal, and may fit within the general concept of desired conditions, there are insufficient objectives, standards, and planning tools to adequately make progress toward the desired condition. The Draft Plan also does not (alone or in the related documents) address the findings of the "Coconino National Forest Ecological Sustainability Report (2009 Ecological Sustainability Report) dated September 2009." Given this report, it is hard to understand that this desired condition can be met in ten to fifty years.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: O'Halleran, Tom

Comment:

Overall, the Draft Plan lacks sufficient objectives and standards to plan for progress toward the desired conditions and/or to meet legal requirements. In our comments, we point out some of the specific areas where this occurs, but overall the Forest Service needs to add objectives and standards to meet its legal requirements. Another key area of improvement regards monitoring. Doing so appropriately will not only meet these legal requirements, but also allow the public to understand the bases for future projects and follow Forest Service guidance.

Response:

Desired conditions in the Forest Plan do not need an accompanying standard or guideline to be implemented. While it is true that projects and activities must meet the guidance in standards and guideline, projects and activities must also be consistent with the desired conditions in the Forest Plan. To demonstrate consistency with the desired conditions, a project or activity must be designed to Maintain or make progress toward one or more of the desired conditions of a plan without adversely affecting progress toward, or maintenance of, other desired conditions; or Be neutral with regard to progress toward plan desired conditions; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward other desired conditions in a negligible way over the long term. Objectives are not targets, but projections, and they may not be fully achieved based on a variety of factors. The objectives in the Forest Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. See the Plan Content and Guiding Future Projects, Program Plans, and Assessments sections in Chapter 1 of the Forest Plan for additional information on the need to be consistent with desired conditions.

Comment:

We acknowledge that desired conditions are not themselves time specific (that is where objectives need to come into play). Nonetheless, the statement in the Draft Plan that it can take hundreds of years to reach a desired condition has the effect of rendering the desired condition meaningless and/or highlighting the need for more objectives. The statement also is contrary to Forest Service planning documents, which explain that desired conditions, while not timebound, should be accomplished in 10 to 50 years. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). The Draft Plan should be clarified to comport with the direction by Forest Service documents. Without this clarification, there is a distinct risk of pushing off projects that may be needed to achieve the desired condition and could have worse impacts.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: O'Halleran, Tom

Comment:

Given that the Forest Service announced it was drafting the plan under the 1982 rules, the Draft Plan should be amended to address those rules specifically. Even if the Forest Service were drafting under the 2012 planning rule, the Draft Plan needs more standards and guidelines to allow the Forest Service to meet its obligations under a variety of applicable laws, including the Endangered Species Act (ESA), the National Environmental Policy Act (NEPA), and the NFMA.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: O'Halleran, Tom

Comment:

In terms of procedural requests, we ask the Draft Plan be disapproved in its current form, be revised to take into account public comments, that there be additional public participation in the redrafting process, and that the Draft Plan and DEIS be reissued as a revised draft plan (and as necessary DEIS) for additional comments before finalization.

Response:

The Coconino NF followed the public participation requirements outlined in the National Environmental Policy Act, National Forest Management Act, and provisions of the 1982 Planning Rule to develop the proposed plan, alternatives, and a draft environmental impact statement. These documents were made available for review during a 90-day public comment period. The public comments received on the proposed plan, the alternatives, and the draft environmental impact statement have been used to make adjustments to the proposed plan, the alternatives, and the environmental impact statement. The adjustments were not substantial enough to merit publication of a supplemental or revised environmental impact statement or conduct another comment period.

Comment:

While moving toward desired conditions may increase resiliency and thereby blunt potential climate change impacts, the Draft Plan lacks sufficient planning tools (standards, objectives, etc.) and monitoring to demonstrate movement toward the desired conditions and/or understand impacts of climate change to assess the ability to reach the desired condition and what additional measures may need to be taken. It becomes an aspiration to be resilient without a strategic plan to become resilient.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest

Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Commenter: O'Halleran, Tom

Comment:

Reference: MA-SedOak-S (pg. 136, #7) - Land Exchange - scenic quality. Issue: As cited above, exchanges are allowed only if they result in acquisition of land within the Sedona Oak Creek MA. While this is a provision that KSB supports, we believe it should be more restrictive. This language would allow a land exchange that technically meets the standard but results in a diminishment of the scenic integrity of the area. Alternative: At the end of #7 add the following sentence: "The land received by the Forest Service in any such exchange must have "scenic integrity" (Glossary pg. 204) equal to or greater than the land being exchanged."

Response:

The standard has not been modified as suggested. While scenery is definitely an important resource in the Sedona-Oak Creek area, there are other qualities in the area that may be benefited by a land exchange. The forestwide guidelines on Land Adjustments provide the direction for what qualities acquired and exchanged lands should have. See FW-LndAdj-G-1 and 2. Scenic integrity is expressly listed as a quality the Forest takes into account when considering land acquisition. See FW-LndAdj-G-1.

Commenter: O'Halleran, Tom

Comment:

Given the problem of light pollution worldwide, it is important that the Draft Plan have outdoor lighting Standards, Guidelines, Objectives, and Desired Conditions. The Draft Plan's outdoor lighting plan should conform to the dark-sky compliant lighting prescribed by the International Dark-Sky Association (IDA) or a local community that has a stringent outdoor lighting ordinance. Flagstaff and Sedona, neighboring communities to the CNF, have stringent outdoor lighting ordinances. The Plan should show a commitment to preserving dark skies by developing a dark-sky compliant outdoor lighting standard that is similar to these ordinances (see also the IDA Model Lighting Ordinance) and implementing that standard within three (3) years of adoption of the Draft Plan.[...] A Forest Service standard in the Draft Plan relating to dark-sky compliant lighting will promote ecotourism as well as protect the beautiful night sky and the environment dependent upon it. The dark sky should be conserved for future generations as well as providing forest visitors with the opportunity to be inspired by the magnificent nighttime beauty. Dark-sky compliant lighting reduces energy consumption, reduces light pollution in the CNF, and helps protect wildlife. Astronomy tourism is becoming popular, and a dark night sky is essential for such tourism.

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Comment:

While these questions need to be answered, our position is that, with regards to groundwater, the conclusion that "existing direction" is "adequate" is not based on the best available science and ignores the broader context. In this manner, it does not comply with the 1982 planning rule or other legal requirements. The Forest Service clearly understands that there is a proven scientific connection between most of the groundwater and surface water in Arizona. On DEIS page 58 it states: "Since the vast majority of well withdrawals occur off-forest, they are not within the forest's authority to control." What is not said is that these withdrawals have been and will continue to have an adverse impact on surface water flows and riparian areas both within and outside the CNF. Additionally, the recently released Arizona Department of Water Resources report (Arizona's Next Century: A Strategic Vision for Water Supply Sustainability, Strategic Vision) makes it clear that there is an anticipated imbalance in Arizona's future water supply needs. A critical context for the CNF is that Arizona's Groundwater Code does not protect surface water. In fact Article 17 Section 1 of Arizona's Constitution states: "The common law doctrine of riparian water rights shall not obtain or be of any force or effect in the state." The Central Yavapai Highlands Water Resource Management Study (CYHWRMS) indicates Yavapai County will have an unmet water demand in excess of 80,000 acre feet due to increasing population. CYHWRMS Phase 1 Demand Analysis Summary at Table 4-1-10. The report highlights that the vast majority of the region's water supply comes from groundwater and unless additional supplies can be found the area will need to increase its groundwater pumping. CYHWRMS Phase 2 Executive Summary at 27. Another option discussed has been to increase recharge amount by thinning treatments on our forests or capture of water during precipitation events. In either case these methods could have a profound impact on the surface waters the Forest Service manages and depends on in the CNF. CYHWRMS Phase 3 Water Supply Alternatives at 89. In 2012 the Arizona Water Resource Development Commission released its final report, which indicated that within the next 50 years, Arizona's population would grow to over 12 million and would be over 18 million within a hundred years. This additional growth, as well as increased tourism, will place more pressure on the CNF's finite groundwater resources. Commission Final Report Table 1 at 11. The release in 2013 of United States Geological Survey's (USGS) "Human Effects on the Hydrologic System of the Verde Valley, Central Arizona, 1910-2005 and 2005-2110, Using a Regional Groundwater Flow Model," highlights the impacts that groundwater pumping have already had on in-stream surface water flow. This should also raise questions within the Forest Service on its role in preserving the groundwater resources that the CNF depends on, particularly as it relates to threatened, endangered, or critical species. As discussed, the Forest Service needs to use the best available science when developing a plan. That science points to using an "all-lands" approach, which includes an analysis of how conditions outside CNF may impact CNF and should address those conditions within the Forest Service's control over CNF. It is not apparent from the DEIS or Draft Plan that these conditions are adequately addressed. One way to address the issue is to use the USGS's "Regional Groundwater-Flow Model of the Redwall-Muav, Coconino, and Alluvial Basin Aquifer Systems of Northern and Central Arizona." This water management tool could help the CNF to meet its desired conditions for water quality, quantity and aquatic systems. A review of the Draft Plan's appendix D reveals that none of the above studies or reports was used as source information.

Response:

Forest Service Manual direction for groundwater is located in FSM 2880, Minerals and Geology, Chapter 2880 - Geologic Resources, Hazards, and Services. In this context, the term 'geologic' applies to geology and all its subdisciplines, including hydrogeology (subsurface waters). FSM 2880 references three technical guides: the Technical Guide to Managing Ground Water Resources, Groundwater-Dependent Ecosystems: Level I Inventory Field Guide, and Groundwater-Dependent Ecosystems: Level II Inventory Field Guide (USDA Forest Service 2007, 2012a and b). FSM 2540 provides additional direction for groundwater resources in the context of water developments on and off National Forest System (NFS) lands where NFS has a role in water development or transport. This direction requires consideration of ground and surface water interactions where surface and groundwater are connected. It further recognizes the importance of groundwater in sustaining aquatic and riparian ecosystems. In general, the Forest Plan does not repeat law, regulation and policy. Reference to FSM 2880 and FSM 2540 are included in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan. While most of the Forest's groundwater policy is located in the referenced Forest Service Manuals, the Forest Plan

contains direction related to groundwater, water flow, and water supply. For example, several desired conditions support conditions that facilitate groundwater recharge. See FW-Water-DC-3, FW-Rip-Strm-DC-3, and FW-Rip-Spr-DC-3. Furthermore, several management approaches in Water and Watersheds that remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest. Coordinate with Federal, county, and state organizations and interested stakeholders with respect to groundwater and surface water issues including preservation, water quantity and timing of flows. The Forest Plan includes a Monitoring Plan in Chapter 5 has been developed to meet the requirements of NFMA and the 1982 Planning Rule. In response to these comments, the Monitoring Plan in Chapter 5 of the Forest Plan has been adjusted. To monitor demand on water resources on the Coconino NF, the Monitoring Plan includes the following question: How many water rights have been procured or how many water rights filings have been done? To monitor water flow and water supply in streams on the Coconino NF, the Monitoring Plan includes the following question: What are surface water trends for Oak Creek, Wet Beaver Creek, and Fossil Creek? Finally, the Forest acknowledges the value of USGS's Regional Groundwater-Flow Model of the Redwall-Muav, Coconino, and Alluvial Basin Aquifer Systems of Northern and Central Arizona (2011). The Forest uses this flow model when evaluating the potential impacts of projects or activities on the Forest. As with FSM 2880 and FSM 2540, this flow model is referenced in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan.

Comment:

According to the Forest Service: "Because existing direction outside of the plan was considered to be adequate, additional guidance related to groundwater is not provided under an alternative and, therefore, not analyzed in this environmental impact statement." DEIS at 58. What is the "existing direction" that is referred to in the DEIS? Is it the various Forest Service manuals and an agency technical guide identified in the same paragraph, is it the groundwater code of the State of Arizona, or is it something else?

Response:

Forest Service Manual direction for groundwater is located in FSM 2880, Minerals and Geology, Chapter 2880 - Geologic Resources, Hazards, and Services. In this context, the term 'geologic' applies to geology and all its subdisciplines, including hydrogeology (subsurface waters). FSM 2880 references three technical guides: the Technical Guide to Managing Ground Water Resources, Groundwater-Dependent Ecosystems: Level I Inventory Field Guide, and Groundwater-Dependent Ecosystems: Level II Inventory Field Guide (USDA Forest Service 2007, 2012a and b). FSM 2540 provides additional direction for groundwater resources in the context of water developments on and off National Forest System (NFS) lands where NFS has a role in water development or transport. This direction requires consideration of ground and surface water interactions where surface and groundwater are connected. It further recognizes the importance of groundwater in sustaining aquatic and riparian ecosystems. In general, the Forest Plan does not repeat law, regulation and policy. Reference to FSM 2880 and FSM 2540 are included in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan. While most of the Forest's groundwater policy is located in the referenced Forest Service Manuals, the Forest Plan contains direction related to groundwater, water flow, and water supply. For example, several desired conditions support conditions that facilitate groundwater recharge. See FW-Water-DC-3, FW-Rip-Strm-DC-3, and FW-Rip-Spr-DC-3. Furthermore, several management approaches in Water and Watersheds that remind forest managers to: File for water rights on appropriable waters following State procedures. Complete all documentation required for the adjudication process in the Little Colorado and Gila River (Verde watershed) specified by the courts. Prioritize streams for water right filing based on risk of diversion and subsequent onsite loss of water, and habitat for threatened and endangered aquatic species. Complete required stream gaging and file applications on priority streams. Gaging, filing, and any associated adjudication are completed as budgets allow. Participate in State water rights adjudications and settlement discussions for negotiating water rights settlements outside of extended adjudication. Secure water rights through purchase or severance and transfer when additional sources are needed. Consider water rights during project planning and implementation. Maintain and annually update an inventory of all water rights on the forest. Coordinate with Federal, county, and state organizations and interested stakeholders with respect to groundwater and surface water issues including preservation, water quantity and timing of flows. The Forest Plan includes a Monitoring Plan in Chapter 5 has been developed to meet the requirements of NFMA and the 1982 Planning Rule. In response to these comments, the Monitoring Plan in Chapter 5 of the Forest Plan has been adjusted. To monitor demand on water resources on the Coconino NF, the Monitoring Plan includes the following question: How many water rights have been procured or how many water rights filings have been done? To monitor water flow and water supply in streams on the Coconino NF, the Monitoring Plan includes the following question: What are surface water trends for Oak Creek, Wet Beaver Creek, and Fossil Creek? Finally, the Forest acknowledges the value of USGS's Regional Groundwater-Flow Model of the Redwall-Muav, Coconino, and Alluvial Basin Aquifer Systems of Northern and Central Arizona (2011). The Forest uses this flow model when evaluating the potential impacts of projects or activities on the Forest. As with FSM 2880 and FSM 2540, this flow model is referenced in the Watersheds and Water, Constructed Waters, Riparian Areas section in Appendix D of the Forest Plan.

Comment:

KSB is also concerned about changes to how management indicator species (MIS) are addressed from the current CNF plan the Draft Plan. Under the current plan, there are more MIS and the plan ties MIS to management areas, allowing for focused studies and analysis, as well as comparison across areas, which would lend to better management of these important species. By contrast, the Draft Plan addresses MIS forest-wide and is greatly reduced. There does not seem to be a scientific basis for the reduction or the decoupling of species from management areas (and if there is a basis, it is not clear from the Draft Plan or DEIS). In addition, the Draft Plan does not identify MIS for riparian, aquatic, tundra, or wetland ecosystems even though the Forest Service acknowledges the "majority of threatened and endangered species on the forest are associated with perennial streams and riparian habitat." DEIS at 224. Without the appropriate identification of MIS, there will be inadequate monitoring. Also, the plan must prescribe "measures to mitigate adverse effects" on MIS. 36 C.F.R. § 219.19(a)(1) (1982). Given these and other similar concerns related to MIS planning, the Forest Service will not be able to meet its obligations under the ESA and other laws, at least with the Draft Plan.

Response:

There is no requirement to select a management indicator species (MIS) for every ecological response unit (ERU). Rather MIS were selected for ERUs where management activities and restoration objectives are planned and change would be expected during the life of the plan: Ponderosa Pine (Gambel oak sub-type), Mixed Conifer with Aspen, and Mixed Conifer with Frequent Fire ERUs (Mexican spotted owl), Ponderosa Pine (old growth and snags) ERU (pygmy nuthatch), and grassland ERUs (pronghorn antelope). Threatened, endangered, and sensitive (TES) species have individual analyses in the environmental impact statement and the Biological Assessment and Biological Evaluation. Gunnison's prairie dogs are discussed in the Biological Assessment because they are a primary food item for black-footed ferrets as well as in the Final Environmental Impact Statement and the Species Viability Report. Application of the 17 MIS identified in the 1987 plan was found to be less than useful because some species are habitat generalists (e.g., elk use grasslands, woodlands, forests, riparian areas, etc.) so their populations are not closely tied to management in any one habitat or ERU. In addition, population changes of some 1987 plan MIS were too difficult to assess compared to influences (e.g., macroinvertebrates in watersheds that have more influencing factors than can be measured). Additional details on the review of the 17 MIS that are identified under the 1987 plan can be found in the Management Indicator Species Status Report for the Coconino National Forest (USDA Forest Service 2013) found in the plan set of documents. Also, in lieu of selecting for a whole variety of birds that can be influenced by management and a broad range of species associated with water on the Coconino NF, two "ecological indicators" or EIs were selected. Aspen is an ecological indicator of habitat diversity, and early seral stages in the following ERUs: Mixed Conifer with Aspen, Mixed Conifer with Frequent Fire, Spruce-Fir, and in localized areas in Ponderosa Pine. The Monitoring Plan has a question that reads: How much have management activities contributed to maintaining or moving towards desired conditions for aspen? Aquatic macroinvertebrates were selected as an ecological indicator of water quality. The Monitoring Plan has a question that reads: Have management activities contributed to impairment of warm water or cold water streams based on aquatic macroinvertebrate metrics?

Comment:

Another example relates to native fish populations. The Draft Plan notes that 15 of the 16 native fish species in the CNF are federally listed or classified as sensitive. Draft Plan at 72. The Forest Service links the fate of the native fish to disease and the amount and attributes of non-native fish, among other factors. E.g., DEIS at 333; 2009 Ecological Sustainability Report at 4-121. This risk to federally listed or sensitive fish species, though, is not adequately addressed in the Draft Plan. The lack of doing so results in the Forest Service not being able to meet its obligations under a variety of laws, including the ESA. Appropriate standards, objectives, guidelines, and management practices to address this issue would allow the Forest Service to meet these legal requirements, as well as address various desired conditions, including those relating to such species, water quality (given the impacts of non-native species), recreational uses, and others.

Response:

The Forest Plan addresses the native fish species and the concerns related to disease and non-native species through a variety of strategic and specific plan components. Broad plan components describing desired habitat conditions, including the presence of non-native fish and disease have been included in the All Ecosystems section. See FW-Eco-DC-1 and 4. Desired conditions in the All Riparian, Streams, and Springs sections seek to provide habitat for all species on the Forest. See FW-Rip-All-DC-3, FW-Rip-Strm-DC-2, and FW-Rip-Spr-DC-5. The Wildlife, Fish, and Plants section includes additional direction on desired habitat conditions, including habitat for species listed under the Endangered Species Act and aquatic species. See FW-WFP-DC-1, 2, 3, 4, and 6. Consistency with these desired conditions is required when implementing decisions under the Forest Plan. See the Guiding Future Projects, Program Plans, and Assessments section in Chapter 1 of the Forest Plan. A variety of guidelines throughout the Forest Plan require projects and activities to be designed and managed to maintain or move towards these desired conditions. The Forest Plan places an emphasis on native species, addressing them in many plan components. For examples, see FW-Eco-DC-1 and 4, FW-Water-DC-6, FW-Water-G-6, FW-Rip-Strm-G-1, FW-Rip-WtInds-DC-1 and 2, FW-Rip-Spr-DC-2, FW-Rip-Spr-G-3, FW-Rip-RipType-DC-2 and 6, FW-Rip-RipType-G-2, FW-WFP-DC-1, 2, 3, 4, 9, and 10, FW-WFP-G-3, FW-Invas-DC-1, FW-Invas-G-1 and 2, FW-Graz-G-7, FW-RdsFac-G-9, FW-Rec-Dev-G-2, and FW-Scenic-DC-1. The Forest Plan also contains plan components that address non-native species. The Forest Plan recognizes that some non-native species may be present and in balance with properly functioning ecosystems. See FW-Eco-DC-4. A Wildlife, Fish, and Plants component recognizes that barriers to passage can be desirable to physically separate native and non-native species. See FW-WFP-DC-9. A Wildlife, Fish, and Plants management approach reminds forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing. Several components also address the management of invasive species for the benefit of native species. See FW-Invas-DC-1. A management approach in the Invasive Species section reminds forest managers to: Coordinate with stakeholders and the public to reduce, minimize, or eliminate the potential introduction, establishment, spread, and impact of non-native invasive species and to monitor the effectiveness of project design features. Finally, the management of disease in aquatic systems is addressed in several guidelines. See FW-Rip-Spr-G-3 and FW-WFP-G-3 and 12.

Commenter: O'Halleran, Tom

Comment:

In addition, the Forest Service should be coordinating with other federal and state agencies who may be doing monitoring to determine the parameters for objectives, standards, or guidelines that specifically address sensitive species. These deficiencies are among the ways the Draft Plan does not comply with the 1982 planning rules or allow the Forest Service to fulfill its obligations under other laws. E.g., 36 C.F.R. § 219.19.

Response:

The Coconino NF has coordinated with the US Fish and Wildlife Service and the Arizona Game and Fish Department during the development of the Forest Plan. NEED TO FINISH

Draft

Comment:

The Draft Plan insufficiently explains and/or addresses its requirements under the Endangered Species Act and other legal requirements with regards to endangered, threatened, or critical species (or similar designations). For example, the Draft Plan notes: "Recommendations regarding Mexican spotted owl (MSO) habitat are contained in the 'Mexican Spotted Owl Recovery Plan.'" The Draft Plan, though, does not appear to incorporate these recommendations into specific objectives, standards, or guidelines. Without time-specific actions defined in objectives, it is unclear how the MSO habitat will be properly managed.

Response:

The Forest Plan includes direction designed to ensure the viability of species occurring on the Coconino National Forest. This direction is cumulatively expressed through desired conditions that define desirable and necessary habitat, standards and guidelines that protect habitat and species, and management approaches that suggest management techniques and opportunities that are beneficial to species. Mexican spotted owl - The Forest Plan includes guidelines that require adherence to approved recovery plans, species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-1 and 2. By referencing these types of documents, instead of listing specific direction from these documents in the Forest Plan, the Forest Plan will be able to remain current with these documents as they are revised over time. The Forest Plan would not contain outdated direction. Mexican spotted owls are specifically mentioned in FW-TerrERU-PP-DC-1, 7, and 13, FW-TerrERU-MC-All-DC-1 and 3, FW-TerrERU-MC-MCFF-DC-11. Dwarf mistletoe and oak, which are nest and roost sites for owls, as well as valuable for other wildlife species, are specifically mentioned in FW-TerrERU-PP-14 and 15 and FW-TerrERU-MC-MCFF-DC-12. There are two standards in the section on Wildlife, Fish, and Plants that would protect listed, proposed, or candidate species as well as eagles. See FW-WFP-S-1 and 2. There are a number of guidelines specific to species as well. To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines. See FW-WFP-G-2. FW-WFP-G-8 and 9 provide timing restrictions for sensitive species and minimal fire suppression techniques for both federally listed and sensitive species. Other protections for sensitive and endemic species, raptors, and amphibians occur in FW-WFP-G-10, 11 and 12. Northern goshawk - Northern goshawks are specifically addressed in several areas in the Forest Plan. See FW-TerrERU-PP-DC-1, 3, and 12, FW-TerrERU-MC-All-DC-1, FW-TerrERU-MC-MCFF-DC-5 and 9, FW-TerrERU-MC-MCA-DC-8, FW-TerrERU-SF-DC-8, and FW-TerrERU-WFP-G-14. Numerous guidelines would maintain or protect habitat for aquatic species and those associated with riparian habitats. See FW-Rip-All-G-2 and 3, FW-Rip-Strm-G-1 and 2, FW-Rip-Spr-G-1 through 4, and FW-Rip-RipType-G-1 through 4. Guidelines in the Invasive Species section would also improve and protect native species habitat. See FW-Invas-G-1 and 2. There are guidelines in each individual Terrestrial ERU that are designed to maintain, protect, or enhance the habitat. The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Commenter: O'Halleran, Tom

Comment:

Insert second new Guideline under Dark Skies heading. 1) Chapter 3, page 131; Guidelines for Sedona/Oak Creek Management Areas 2) Alternative Language of new Guideline under its own heading: MA-SedOakG#2 Dark Skies For public education on Dark Skies, create brochures to be placed in Visitor Centers and add appropriate text to rules for FS camp sites, RV sites, concession facilities, roads, signage, etc., stipulating the type of outdoor lighting permitted on such sites.

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Commenter: O'Halleran, Tom

Comment:

Insert first new Guideline for preserving dark skies 1) Chapter 3, page 137; Guidelines for Sedona/Oak Creek Management Areas; put it immediately after Scenery, under new heading Dark Skies 2) Alternative Language of new Guideline (omit: under its own heading): MA-SedOak-G#1 Dark Skies All new lighting on Forest land should conform to the local Outdoor Lighting Ordinance or to dark-sky compliant lighting prescribed by the International Dark-Sky Association, whichever is more stringent in preventing light pollution. Any existing grandfathered non-compliant fixtures shall be replaced with dark-sky compliant ones. The Forest Service should be a leader in implementing new lighting technology that saves energy and prevents light pollution (including from light rich in the blue wavelengths - hard white light - which is especially detrimental to astronomical research so important to Northern Arizona).

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Commenter: O'Halleran, Tom

Comment:

Create a Standard for preserving dark skies forest-wide in general and for the Sedona/Oak Creek MA in particular, because this MA lies within the City of Sedona and Yavapai County, both of which have outdoor lighting ordinances that protect the dark sky. 1) Chapter 3, page 137; Insert a new Standard under new heading Dark Skies; MA-SedOak-S #1 2) Alternative Language of new Standard under its own heading: Dark Skies MA-SedOak-S#1 All outdoor lighting on Forest Service property, including roads, parking lots, recreation facilities, visitor centers, outhouses, toilets, camp grounds, staff residential areas, concession buildings and signage must be dark-sky compliant or conform to local outdoor lighting ordinances, whichever is more stringent in preventing light pollution.

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Commenter: O'Halleran, Tom

Comment:

Also, it is not apparent from the documents that the requirements of 36 C.F.R. Section 219.17 (1982) are fulfilled because there was not a summary of the roadless areas in the CNF, and then the planning documents lacked an evaluation or consideration for recommendations of roadless areas (that is, it was not in the Analysis of Management Situation document, the DEIS, or the Draft Plan). The Draft Plan should more fully assess and discuss roadless areas and whether they should be pursued for Wilderness designation.

Response:

The Forest Plan has been adjusted in response to this comment. An Inventoried Roadless Area section has been added to Chapter 3 of the Forest Plan. This section identifies the nine Inventoried Roadless Areas on the Forest and provides a desired condition and a standard designed to maintain the overall roadless character of these areas. See SA-IRA-DC-1 and SA-IRA-S-1. The Inventoried Roadless Areas have been added to Map 2 in the Forest Plan to display where they are located. Inventoried Roadless Areas were considered in the wilderness evaluation process for this forest plan revision effort. According to the Potential Wilderness Area Inventory Process described in the Wilderness Evaluation Report (USDA Forest Service 2016), the Forest looked at areas of 5,000 acres or more that did not have permanently authorized roads. This put all or substantial portions of the Walker Mountain, Boulder Canyon, Cimarron Hills, Hackberry, and Padre Canyon inventoried roadless areas into the inventory of potential wilderness areas that were then considered for capability, availability, and need. Two Inventoried Roadless Areas that are smaller than 5,000 acres were also included in the potential wilderness area inventory because of the 1982 Planning Rule Provisions at 219.17(a)(1)(i).

Commenter: O'Halleran, Tom

Comment:

Forest-wide commitment to preserving the dark skies should be indicated through publications and educational information about preserving the night sky and by being placed in the Visitor Centers. The Forest Service should provide leadership to educate forest visitors and recreational outfitters about the importance of dark-sky compliant lighting.

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Commenter: O'Halleran, Tom

Comment:

Cedar Bench: * Adjacent to the important West Clear Creek Wilderness Area. * Would benefit a variety of species and protect the biodiversity of the area. West Clear Creek has more biodiversity than many other areas of the Southwestern United States. Botanical and wildlife resources in the area include Verde Valley sage, golden and bald eagles and southwestern willow flycatcher. Evaluation Report at 43. * West Clear Creek is a major tributary of the Verde River, * West Clear Creek's water quality would be better protected. Evaluation Report at 43. This would be expected to benefit the Verde River water quality.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for

determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

A dark sky is a natural resource that needs to be protected for posterity. In the Draft Plan, the dark sky is considered as part of Scenery. But the dark sky has great importance for the forest visitor in terms of experiencing the natural world, of which the nightscape is an important component, and for the amateur and professional astronomers who are drawn to Arizona by the dark skies to be found here, and specifically within the CNF. Because of the interest in dark-sky tourism and the concomitant significant contribution to state and local economies, Dark Skies need to be a stand-alone Desired Condition, both forest-wide and especially for the Sedona/Oak Creek Management Area. See 36 C.F.R. § 219.1(b)(14) (1982). Also, as an editing note, the wording "astronomical astronomy resource" as stated in #4 of MA-SedOak-DC is awkward.

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Comment:

Hackberry: * Helps preserve the unique qualities of the Wild and Scenic section of the Verde River. * Mostly free of human disturbance. Evaluation Report at 55. * High potential for scientific research and cultural opportunities. Contains several unique and rare species, including lowland leopard frog, narrow-head and Mexican garter snakes and Yellow-billed Cuckoo. Evaluation Report at 55. * Preserving the primitive surroundings would benefit species, including many threatened and endangered species. Area is within four identified wildlife corridors. Evaluation Report at 56. * Wilderness characteristics of this area would be enhanced. Evaluation Report at 57. * The primitive setting would promote the biodiversity of the area. * Social values related to the addition of the wilderness would include community effects, passive use values, scientific values, biodiversity values, off-site benefits, ecological services and educational values. (Forest Service 2011) * Its close proximity to the Fossil Springs Wilderness Area.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismarck, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term

commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Comment:

Black Mountain: * Currently mostly free from human disturbance. Evaluation Report at 45. * Adjacent to the important West Clear Creek Wilderness Area and would provide additional protection to the environment, special species and watershed. * Contains 187 acres of regionally under-represented ecosystems. * Area in two identified wildlife corridors. Evaluation Report at 46. * Rated high for need and capability. Evaluation Report Table 1 at 8. * Increase of wilderness character in West Clear Creek Wilderness. Area would promote wilderness recreation and includes a popular swimming hole. Evaluation Report at 48. * Primitive setting would benefit a variety of species and would promote biodiversity. The area would promote watershed quality and function. Other riparian resources would also be better protected from user interest in water-related recreation opportunities. Evaluation Report at 48.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismarck, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term

commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

A. Create new Desired Conditions in the following: 1) Chapter 3, page 131; Desired Conditions for Sedona/Oak Creek Management Area; MA-SedOak-DC #4; Create new Desired Conditions after Scenery and before Developed Recreation 2) Alternative Language of new Desired Conditions: Dark Skies in the modern civilized world are becoming a rare natural resource due to light pollution. The dark night sky of the SedOak MA is exceptional. On moonless nights the Milky Way cuts a broad bright swath across the sky and major constellations are easily identified by naked eye. The dark skies are protected for posterity by prevention of light pollution and education of the public as to the importance of dark skies for the ecosystem and for astronomy. If the current sentence in the Draft Plan is to be retained, however, it should read: "Clear, dark night skies are valued for stargazing and as a necessary natural resource for the amateur and professional astronomers."

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Commenter: O'Halleran, Tom

Comment:

Cimmaron-Boulder: * Expansion of the current wilderness around West Clear Creek will have a positive impact on wilderness experience and preservation of the watershed.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

KSB believes that the management areas and special areas of the Plan do not emphasize the importance of preserving the dark skies. There are no standards, guidelines, objectives, or desired conditions in the Draft Plan that adequately address limiting light pollution and preserving the magnificent dark skies.

Response:

Several adjustments have been made to the revised Plan in response to your comment. Additional information on the night sky resource and observatories has been added to the General Description and Background subsection of the Air Quality, Wildland Urban Interface, Anderson Mesa, Flagstaff Neighborwoods, and Long Valley Management Areas sections. A desired condition for clear and dark night skies was added to the Air Quality section. See FW-Air-DC-2. A desired condition to protect astronomical sites is included in the Wildland Urban Interface section. See FW-WUI-DC-2. These are forestwide desired conditions that apply to all management and special areas. Furthermore, local ordinances related to light control or light pollution have been added to the Air section in Appendix D of the revised Plan.

Commenter: O'Halleran, Tom

Comment:

The review of watersheds should be more robust in accordance with 36 C.F.R. 219.23 (1982). For example, the Draft Plan should clearly identify varying water volumes, including extreme events. KSB believes this should integrate the potential impacts of climate change on watersheds and water volumes.

Response:

Two items have been added to the Monitoring Plan in response to these comments. One would track the number of water rights procured or water right filings made, and the other would track peak flows and annual flows for three major streams: Oak Creek, Beaver Creek, and Fossil Creek.

Draft

Comment:

KSB strongly believes these areas should be preserved in addition to those in Alternative B due to their unique nature, location to significant surface waters in Arizona and need for wilderness recreation opportunities. If designated, these areas will allow Arizona and the Forest Service to preserve lands necessary for the protection of our watersheds and threatened and endangered species. These additional wilderness areas also would help the CNF with regards to biodiversity and resiliency given climate change. Their addition into the Draft Plan and Alternative B would also assist the Forest Service with meeting desired conditions and objectives of creating more recreational wilderness, improving water quality (including lowering TMDLs), providing for connected wilderness experiences, protecting wilderness areas that have significant national values, and preserving the area for future generations. As indicated in the Draft Plan, the CNF currently encompasses approximately 2 million acres. The seven additional wilderness locations we recommend for inclusion into the Draft Plan and Alternative B are a total of 74,759 acres or approximately 3.7 percent of the forest. There has been broad-based support for these areas being designated wilderness since, at the latest, 2007. There is a need to look at the wilderness designations in light of recent information on population growth, water resource needs, increasing tourism, need for wilderness areas, species protection, and preservation and the economic realities of northern Arizona. Following these recommendations should lead us to the conclusion that the addition of the seven wilderness areas discussed above, representing 3.7 percent of the CNF, will have a net positive impact on the forest and related outcomes. It also will help meet multiple desired conditions across the Draft Plan and meets the overall regulatory requirement of planning geared toward sustainability.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for

the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: O'Halleran, Tom

Comment:

The CNF also has the ability to partner with the Climate Assessment for the Southwest (CLIMAS) part of the University of Arizona's Institute of the Environment and was established as part of NOAA's Regional Integrated Sciences and Assessment program. There is a wealth of information available through established and credible government agencies from which to base management decisions. These partnerships should be part of a proactive process in maintaining and attainment of desired conditions where they currently do not exist. See also, e.g., Forest Service, Climate Change Considerations in Land Management Plan Revisions 2, 7 (Jan. 20, 2010) (Climate Change Considerations). The Draft Plan should be more specific as to how the Forest Service will interact with groups on research and analysis of issues.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in

the plan? Have there been unanticipated changes in conditions? Can changes can be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Draft

Comment:

KSB feels that a management approach that requires climate change to be an ongoing part of the evaluation process is critical to maintaining and attaining desired conditions. As indicated in the 2012 Climate Report, proactive climate change planning will result in a broad range of options for sustainability. It is also a necessary part of best management practices so that desired conditions do not continue to deteriorate and therefore have a negative impact to the forest. As indicated in the Draft Plan and DEIS there are many areas of the forest that are not in a functioning state today. These include many of the watersheds within the forest. Climate change is expected to negatively impact the forest further.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes can be attributed to climate change? What modifications are needed to

account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Draft

Comment:

While the Forest Service has identified areas that will likely be impacted by climate change, the Draft Plan specifies relatively few desired conditions and almost no planning tools regarding climate change. Additionally, the Forest Service does not adequately tie climate change analysis, vision (desired conditions), strategy (standards, objectives, etc.), or monitoring to federally listed or sensitive species. In this way, the Draft Plan does not meet the Forest Service's guidance documents, the 1982 planning rule, or other legal obligations (e.g., NEPA and ESA). E.g., Climate Change Considerations at 3 ("identify some steps that could be taken during the life of the plan"), 4 ("Consider the influence of climate change in developing plan direction related to threatened, endangered and sensitive species."), 5-6 (each of the three examples of desired conditions includes an objective and either a standard and/or a guideline).

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of

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Comment:

We believe that climate change should be an identified program that is proactive, transparent, and integrated with the ongoing monitoring program. The monitoring program should include components to specifically monitor climate change, as integrated into other monitoring (which as discussed elsewhere needs to be improved). See id. at 1 ("Place increased value on monitoring and trend data to understand actual climate change implications to local natural resource management."), see also id. at 3 (the following evaluation tools are also good filters to develop a monitoring program: "water availability, systems susceptible to changes in temperature, and elevated levels of atmospheric CO₂ as factors affecting ecosystems").

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes be attributed to climate change? What modifications are needed to

account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Draft

Commenter: O'Halleran, Tom

Comment:

The Draft Plan should include specific planning tools about collaborating with an active climate networking program with state and local government, land owners, and the public.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate

change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Commenter: Prosser, Judy

Comment:

We would further suggest the use of "maintaining or making progress toward achieving" throughout the document, as was done in the Objectives paragraph which follows Desired Conditions.

Response:

The discussion on desired conditions in Chapter 1 of the Forest Plan has been adjusted to clearly state that maintaining or making progress toward a desired condition is one of the ways that a project or activity can demonstrate that it is consistent with the desired condition. This concept has been included in many guidelines throughout the Forest Plan. For example, see FW-Rip-All-G-1 and FW-TerrERU-All-G-1.

Commenter: Prosser, Judy

Comment:

Page 177 Monitoring Strategy, second paragraph: What is the definition of "Required" monitoring? And who is required to do it? Given the monetary constraints of Range Staff, how will this play out?

Response:

The Monitoring Strategy and Plan included in Chapter 5 of the Forest Plan was developed to address the Forest's obligation to conduct monitoring under the 1982 Planning Rule provisions while considering Forest staffing and budget levels over the life of the Forest Plan. Many of the monitoring questions have been adjusted to clarify the measure and data sources being used to answer the question. Whenever possible and appropriate, the Forest has sought to use existing data collection efforts to answer the monitoring questions which is intended to reduce the cost (both in dollars and in personnel) for monitoring. The sentence to which this comment is referring is no longer in the Monitoring Strategy and Monitoring Plan. Instead, the introduction simply states that "monitoring and evaluation are required by the 1982 Planning Rule provisions" and there is no longer any reference to required monitoring elements.

Commenter: Prosser, Judy

Comment:

Page 174 There is no provision for Grazing Permittees to use motorized vehicles for normal maintenance or livestock movement. Why can't a portion of the language in the AOI's be transferred to the Plan? Because this is such an important clause for permittees, we would like to have the framework in something more concrete than the annual operating instructions. That language is: "Motorized travel off the designated road system, including off-road access, by grazing permit holders will be based on the need to carry out required management practices necessary to comply with the terms and conditions of the Term Grazing Permit. Examples of required management practices include, but are not limited to: the repair and maintenance of structural range improvements; transport and placement of mineral or protein supplement; herding of livestock; and tending to sick or injured animals."

Response:

The Forest Plan has been adjusted in response to this comment. A management approach has been added to the Livestock Grazing section reminds forest managers: When developing Annual Operating Instructions for grazing permit holders, consider the need for motorized travel off the designated road system and off-road to carry out required management practices necessary to comply with the terms and conditions of the Term Grazing Permit. Examples of required management practices include, but are not limited to: the repair and maintenance of structural range improvements; transport and placement of mineral or protein supplement; and tending to sick or injured animals.

Commenter: Prosser, Judy

Comment:

Page 80 Management Approaches (4th paragraph) "Consider establishing forage reserves ... " What does this mean? Are you referring to pasture rotation or allotment vacancy? It has been proven over time that vacant allotments lose their improvements and no one is willing to spend the money to fix them, especially the fences. Also as the grasses get decadent they are less vigorous. If this is intended to be for a drought reserve, one would think that is a good strategy, when possible. It should be part of an overall collaborative drought plan and the "reserve" could rotate between various pastures within an allotment, so that one could maintain good plant health, younger age structure, soil microbe health, etc.

Response:

A definition for "forage reserves" has been added to the Glossary for the Forest Plan.

Commenter: Prosser, Judy

Comment:

Page 79 Livestock Grazing General Description. The first sentence is not accurate, as livestock grazing occurred before the CNF was established. It should read "Livestock Grazing on what is now the Coconino NF was occurring before the Coconino NF was established, and has continued to this day."

Response:

The General Description and Background for the Livestock Grazing section has been adjusted in response to this comment. The information in that section has been changed to acknowledge that grazing commenced in this area in the 1870s and the that Coconino NF began managing livestock on the Forest in 1908.

Commenter: Prosser, Judy

Comment:

Page 75 Guidelines for wildlife fish and plants (10 and 11) "Fences should be" Does that mean ALL fences should be removed or modified from what they are now, or does it mean NEW fences?_The language that was used in (10) i.e. "fences that are no longer needed should be removed" is more clear.

Response:

The guideline related to construction for wildlife friendly fences has been retained with slight editorial adjustments to improve its clarity. See FW-WFP-G-6. Another guideline has been added to the Wildlife, Fish, and Plants section that requires structural improvements to be planned and managed to provide wildlife with safe use of water and to allow safe passage. See FW-WFP-G-5. These guidelines would be applicable to any new decisions on fence construction and/or modification of existing fencing. In addition, a sentence has been added to a management approach in Wildlife, Fish, and Plants to remind managers to reference current agency recommendations for improving wildlife habitat. It reads: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing.

Commenter: Prosser, Judy

Comment:

Page 45 Guidelines for Great Basin and Montane/ Subalpine Grasslands, #1 states " ... move towards a 90% vegetative ground cover ... In Table 4, on previous page (44), it ranges from 20-90% depending on soil type. We suggest removing the 90% replacing it with a narrative that is consistent with Table 4.

Response:

The Forest Plan has been adjusted in response to this comment. The guideline suggesting 90 percent vegetative ground cover for Great Basin and montane/subalpine grasslands has been removed from the Forest Plan, as has the table listing the desired cover ranges for grasslands. The desired level of vegetative ground cover to reduce erosion and gully formation and maintain soil function and productivity is addressed in the Soil section. See FW-Soil-DC-3. Plant composition in grasslands is desired to be similar to site potential (greater than 66%), as determined by the Terrestrial Ecological Unit Inventory (TEUI) or other appropriate ecological classification system. See FW-TerrERU-Grass-DC-1.

Commenter: Prosser, Judy

Comment:

Page 45 Guidelines for Grassland Types, All #2 What does, "Natural waters within a quarter of a mile of fawning habitat should be maintained and available to pronghorn " mean? 1. What is the definition of "natural" waters? and, 2. What is the definition of "maintained"? Does this mean that fences on enclosures are maintained? Or does this mean that tanks will be cleaned from silt? Or both?

Response:

The Forest Plan has been adjusted in response to this comment. The direction included in the guideline related to natural waters has been merged with several other components similar direction related to management of water sources and access to water sources. See FW-WFP-G-5, FW-Graz-6, FW-ConstWat-DC-2. The term "natural waters" is no longer used in any plan component.

Commenter: Prosser, Judy

Comment:

Page 4 Climate Change Concerns, third paragraph- "Improved ecosystem function ... improve the resiliency of ecosystems to WITHSTAND changes in disturbance patterns ... ". We would suggest removing WITHSTAND and replacing it with ADAPT TO. Reasoning: The current recognized and applied definitions of ecological resilience basically refer to the ability of an ecosystem to either resist, recover from, or adapt to disturbance.

Response:

The Climate Change Concerns section in Chapter 1 of the Forest Plan has been adjusted in response to this comment. The term "withstand" has been not been removed as suggested because the term fits within the definition of ecological resiliency offered by the commenter. However, the terms "recover from" and "adapt to" were added to this sentence because they help provide a better representation of resiliency means in this context.

Commenter: Prosser, Judy

Comment:

Page 7 In the third paragraph " ... management actions to accomplish desired conditions ... ". This tells the reader that ALL management actions WILL ACCOMPLISH desired conditions, and we all know that is not possible. If ACCOMPLISH was replaced with "maintain or make progress toward achieving", or "designed to accomplish", or "intended to accomplish", to create the idea that yes, this is the goal, but factors other than saying we will do it affect the relative success or failure. The same thing occurs in the Guiding Future Projects, Program Plans and Assessments where the word Achieve is used.

Response:

The discussion on management approaches in Chapter 1 of the revised Plan has been adjusted as suggested to address your concern.

Commenter: Prosser, Judy

Comment:

Page 45 Guidelines for Semidesert Grasslands #2 Road and Trail Locations? Is that NEW roads and trails only or ALL roads and trails?

Response:

This guideline has been moved to the Wildlife, Fish, and Plants section of the Forest Plan to give it forestwide application, rather than limiting it to the semi-desert grassland ERU. See FW-WFP-G-13. In response to this comment, this guideline has been clarified to apply only to new road and new trail locations.

Commenter: Prosser, Judy

Comment:

Page 5 "Desired Conditions" - Throughout the Draft Desired Conditions are referred to frequently, however there is not consistent language within those references. We would suggest that it start with consistency in the description of the Desired Conditions on this page. Four lines from the bottom of this description is the sentence "Projects and site specific activities must be consistent with desired conditions ... ". We would suggest that "must be consistent" be replaced with , "Site specific management plans for production or restoration activities should be designed to maintain or make progress toward desired conditions". Any time the word "must" is used it becomes a requirement.

Response:

Although the revised Plan retains the sentence that states that projects and site specific activities "must be consistent with desired conditions ...", the following additional information has been added to this discussion on desired conditions to clarify the ways site specific projects can demonstrate consistency with desired conditions: To be consistent with the desired conditions of the plan, a project or activity, when assessed at the appropriate spatial scale described in the plan (e.g., landscape scale), must be designed to meet one or more of the following conditions: Maintain or make progress toward one or more of the desired conditions of a plan without adversely affecting progress toward, or maintenance of, other desired conditions; or Be neutral with regard to progress toward plan desired conditions; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward other desired conditions in a negligible way over the long term.

Commenter: Prosser, Judy

Comment:

Page 43 The Plan does a good job of describing Desired Conditions for each of the grasslands. However, we have concerns that there is not clarity between types of grassland and size of the landscape, e.g. mid scale vs. fine scale. For example: 1. Under Semi-arid Desert Grasslands, Table 3 is inconsistent with the tables for the other grassland types. We suggest it be related to soil types or TES description, as it appears was done with the other grassland types. It also has specific number for % composition. We suggest that a range be used, e.g. 20-40% instead of one specific percentage. 2. Under the Fine Scale, #5, There is a noted a specific location on Red Rock District for Big Sacaton. We think this is the only specific location described in the whole Plan, and therefore is not appropriate. We suggest this be removed and replaced with a descriptive vegetative narrative, like all the other grassland types. 3. Also in that statement, what is the definition of "suitable" soils? It should be defined.

Response:

The Forest Plan has been adjusted in response to this comment. The tables identifying seral stage and cover ranges in the Grasslands section have been moved to Appendix F of the Forest Plan. To ensure consistency between the grassland types, the tables have been modified to display VDDT model states and reference percentages for each grassland type. See table 23, 24, and 25 in Appendix F. These tables were moved to Appendix F because including this information in Chapter 2 of the Forest Plan was causing confusion over how the information in the tables should be used. The seral stage proportions for modeled states included in these tables is for assessment at the scale of the entire ERU within a Forest boundary or greater. Seral stage proportions are rarely, if ever, applied at the project level. For instance, the application of seral stage values for spruce-fir forests that typically have long stand replacement intervals and large patch dynamics, may only be appropriate at subregional scales. To emphasize that the seral stage values in these tables were not intended, in most cases, to be applied at the project level, this information was moved to Appendix F and an introduction was developed to explain the intended purpose of these tables. To provide consistent direction on desired plant composition in grasslands, a Grasslands desired condition was adjusted to indicate that desired plant composition is similar to site potential and site potential is determined by Terrestrial Ecological Unit Inventory (TEUI) or other appropriate ecological classification system. See FW-TerrERU-DC-1. Accordingly, the actual desired plant composition will be determined at the project level based on site specific conditions found in the project area.

Commenter: Quintile, Anthony

Comment:

Trail Terminology The use of the word "features" in the following sentence should be changed to "structures". A trail structure would mean a rolling grade dip or tread armoring. A feature would imply a jump or other rideable "stunt". "Consider single-use trails (as opposed to multiuser trail designs) to accommodate varying user experiences where trail design features (should be "structures") cannot be provided to mitigate user conflicts or provide for a sustainable recreation setting."

Response:

The Forest Plan has been adjusted in response to this comment. The Trails and Trailheads management approach reminds forest managers that: In general, multi-use trails are preferred, though single-use trails may be considered where trail design does not mitigate user conflicts or provide for a sustainable recreation settings between multi-use types.

Commenter: Quintile, Anthony

Comment:

We would like to see language recognizing that slickrock sandstone areas throughout the Sedona/Oak Creek and Sedona Neighborwoods Management Areas are especially valuable for cross-country mountain bike travel. Should further area-restrictions be implemented on bicycle travel in the greater Sedona area, it would be especially important to recognize the unique opportunity that slickrock provides for exploration and challenge on a bicycle.

Response:

No changes to the Forest Plan were made in response to this comment about the value of cross country mountain biking on slickrock in the Sedona-Oak Creek area. The Forest Plan acknowledges that three of the management areas in the Sedona-Oak Creek area provide opportunities for mountain biking. All of these management areas include desired conditions for a network of primarily nonmotorized trails that provide opportunities at multiple development levels for a variety of recreationists, including mountain bikers. See MA-RedRock-DC-3, MA-HouseMtn-DC-2, and MA-SedN-DC-2.

Commenter: Quintile, Anthony

Comment:

Desired Conditions for the Sedona/Oak Creek Management Area and Sedona Neighborwoods. Although we very much appreciate the changes that were made from the first draft, language such as... "Recreation opportunities are primarily nature based, and they exist for individuals, families, or small groups. There are opportunities for experiencing solitude, scenic beauty, and natural quiet." ...fails to acknowledge that this area, (and others on the Forest), should, and do, also provide opportunities for challenging users' abilities. Activities such as mountain biking and rock climbing allow people to seek levels of fitness and aptitude that have a high social value that require the availability of certain landscape features. It is important that the Plan reflects these values in addition to things like solitude, scenic beauty, natural quiet, etc. Recognizing this need can help to guide planning for appropriate types of trails and signage to mitigate safety hazards, reduce illegal trail construction, reduce user conflicts and generate better buy-in from user groups.

Response:

The Forest Plan accommodates a wide range of recreational values in the Sedona-Oak Creek area and across the rest of the Forest. Providing a broad spectrum of developed and dispersed recreation settings is a forestwide desired condition. See FW-Rec-All-DC-4. Some of these recreation settings are to be undeveloped and offer opportunities for primitive character, challenging access, and solitude while other settings are to offer opportunities for more developed infrastructure, easier access, higher levels of social interaction, and increased user comforts. See FW-Rec-All-DC-4. Furthermore, the Red Rock, House Mountain, Sedona Neighborwoods, and Oak Creek management areas include desired conditions that acknowledge a wide range of recreational activities in these areas. See SA-RedRock-DC-2, 3, and 4, MA-HouseMtn-DC-2, MA-SedN-DC-1 and 2, and MA-OakCrk-DC-3 and 6.

Commenter: Quintile, Anthony

Comment:

Desired Conditions for Oak Creek Management Area and elsewhere throughout the document Where opportunities exist, please recognize "bicycles" specifically as a desirable mode of alternative transportation. "Alternative modes of transportation, such as bicycles, that reduce automobile dependency and traffic congestion are encouraged."

Response:

The Forest Plan is strategic in nature and does not include project level decisions. The specific types of alternative modes of transportation is a project level decision, and therefore outside the scope of the decision being made. The plan does specifically mention bicycles in several places however. For example, dispersed recreation should be limited to day-use traffic, by foot or bicycle, to maintain water quality and watershed function in the Inner Basin MA. See MA-InBsn-G-7. Desired conditions for Scenic Roads would promote travel routes along the Red Rock All-American Road that safely accommodate bicycles and pedestrians and connect them to the urban trail system. See SA-ScenicRds-DC-3. Desired conditions in the Mount Elden MA would promote a variety of trail experiences for non-motorized recreation in the Fort Valley Trail System and Mt. Elden/Dry Lake Hills Trail System. See MA-MtElden-DC-3 and 4.

Commenter: Quintile, Anthony

Comment:

Desired Conditions for Fort Valley/Mount Elden Management Area The Plan says: "The trail system is stable and does not increase significantly in mileage." We hope that this direction will not be working against the need for expansion in this system that is currently under review in the Mount Elden Dry Lake Hills Recreation Planning NEPA. The Mount Elden Area is Flagstaff's "back yard" and is much in need of additions to the trail system to address the ongoing increase in growth of demand for recreational trails opportunities. Please refer to our comments submitted in response to the MEDL Recreation Proposed Action.

Response:

The Forest Plan has been adjusted in response to this comment. A large desired condition in the forestwide Dispersed Recreation sections has been divided into several plan components. Part of that plan component was converted in a desired condition for the All Recreation section. See FW-Rec-All-DC-6. This desired condition states: Recreation opportunities are balanced with the capacity of forest resources to support them and user conflicts are minimized. As development and population in the region continue to grow and new forms of recreation emerge, recreation settings on the Coconino NF are stable, retaining their natural character. Short-term increases in recreation during holidays and weekends do not result long-term adverse effects to other forest resources. Desired conditions in Trails and Trailheads promote a variety of trail types, challenge levels for diverse users in a variety of settings; the level of development at trails is appropriate for the site, use, ROS setting, and is sustainable; and damage to resources from visitor use at trails and trailheads is within the ability of forest to mitigate. See FW-Trails-DC-2, 3, 4. In addition, a desired condition in the Trails and Trailheads section states that trail use remains on the established trail surface, especially in high traffic or sensitive areas and unplanned user-created trails are rare. See FW-Trails-DC-11. Several guidelines are included in the Forest Plan to help ensure that decisions on recreation opportunities meet or move toward this desired condition. See FW-Rec-All-G-1 and 2. In addition, a guideline in Trails and Trailheads would require that unplanned, user-created trails be rehabilitated and managed to prevent future access. See FW-Trails-G-3. The Mount Elden Management Area also contains a desired condition on this topic. That desired condition seeks a trail system that is designed to be sustainable while balancing user experiences and impacts. See FW-MtElden-DC-1.

Commenter: Quintile, Anthony

Comment:

Single-use Trails We are very happy to see the option for single-use trails carried forward! Although we strongly support that most trails should be open to as many user groups as are manageable, there are situations that warrant single-use and purpose built trails. We want to point out that this would not only apply to bicycles, but potentially equestrian trails and maybe others. We fully support this language: "Consider single-use trails (as opposed to multiuser trail designs) to accommodate varying user experiences where trail design features cannot be provided to mitigate user conflicts or provide for a sustainable recreation setting."

Response:

This management approach has been retained in the Trails section of the Forest Plan. It has been slightly modified to remind forest managers that multi-use trails are preferred while recognizing that single-use trails may be appropriate in certain circumstances. It states: In general, multi-use trails are preferred, though single-use trails may be considered where trail design features cannot be provided to mitigate user conflicts or provide for a sustainable recreation settings between multi-use types.

Commenter: Quintile, Anthony

Comment:

Mitigate Impacts to Trails and Scenery Caused by Forest Health and Other Projects Please include language that sets Standards and Objectives for minimizing the impacts of Forest health and other projects to recreation resources, specifically trails. Some examples: * Do not convert purpose-built single-track trails to roads for timber extraction or other projects. * If a road-to-trail conversion has been utilized for timber extraction, appropriate measures should be implemented to convert these routes back to trail after a project is completed. * Slash piles should not be located on top of trails * Trees should be marked on the side facing away from roads and trails.

Response:

The Forest Plan contains direction related to impacts on trails and scenery caused by projects and management activities. A guideline in the Trails section requires trails to consider user experience when designing, building, rerouting, or maintaining a trail. See FW-Rec-Trails-G-1. This plan component will guide projects that may propose to convert roads to trails. Guidance for scenery is found in the Scenic Resources section. For example, a guideline in this section addresses how projects should handle evidence of locating slash piles. See FW-Scenic-G-3.

Commenter: Quintile, Anthony

Comment:

Clarification of Goshawk Prescriptions Prescriptions for recreation Special Uses in Goshawk habitat, specifically recreation events, should be made clear. Currently implementation of restrictions to certain types of recreational use, such as mountain bike races, has been subjective and inconsistent, with permits for events issued one year and not the next based upon the discretion of different District biologists. It is our view that this policy should be exceptionally liberal, as goshawks are neither Threatened nor Endangered, and recreation is not widely recognized as having an adverse impact on these animals' ability to thrive.

Response:

The Forest Plan has not been adjusted to create particular management prescriptions that would be applied to all recreation events that occur in northern goshawk habitat. The Forest Plan has been designed to provide strategic guidance for project-level decisions that involve recreation events and northern goshawk habitat. For example, a Wildlife, Fish, and Plants section includes a standard that requires timing restrictions on projects and activities that have the potential to negatively affect federally listed species, bald eagles, and golden eagles. See FW-WFP-S-2. A Wildlife, Fish, and Plants guideline includes a similar requirement for Southwestern Region sensitive species (which includes northern goshawks) and pronghorn. See FW-WFP-G-8. The identification of a specific timing restriction is made at the project-level based on site-specific information related to the project or activity (including the timing, duration, extent, and intensity of the proposed activity) and how it relates to the species in question. The best available information and science would be utilized to develop timing restrictions to reduce impacts to disturbance sensitive species. Some literature suggests that recreation disturbance can negatively impact reproductive success on northern goshawks such as Morrison and others (2011), Kruger (2002), and Gaines et al (2003).

Commenter: Quintile, Anthony

Comment:

Recommended Wilderness Area Management for Mechanized We support that any RWAs be left open to bicycle access if such access is currently allowed until Congress sees fit to designate these areas as Wilderness.

Response:

The direction related to mechanized use in recommended wilderness areas has been retained in the Forest Plan. See SA-RWild-DC-6 and SA-RWild-G-1.

Comment:

Walker Mountain Proposed Wilderness Area Wilderness should only be recommended in rare instances as Wilderness is an extremely restrictive designation that prohibits many recreational uses, including bicycling. Walker Mountain PWA contains the Walker Basin Trail which has been used by bicycles for backcountry exploration, camping and access. Many cyclists have expressed the desire to see a single track connection between Flagstaff and Sedona. With some additions to the system, the Arizona Trail connecting with Walker Basin Trail may be one of the only ways to achieve this. Given that a string of already existing Wilderness Areas line the Mogollon Rim from Perkinsville Road, around Sedona and south to the Verde River, options for ascending or descending the rim on single track trails is virtually nonexistent. Designating this area as Wilderness would continue to contribute to a cumulative loss of opportunities to ride trails in, and through, the Mogollon Rim areas surrounding Sedona. We ask that this PWA not be included as a Recommended Wilderness Area in the final Plan. Although we recognize that it is outside the scope of this Plan Revision Process, we might support different Congressional designations, (National Recreation Area, National Conservation Area), to protect this and other PWAs contained in the various Alternatives should such proposals be made.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in

the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Quintile, Anthony

Comment:

Forest Wide Plan Comments We are generally in favor of Alternative B, with changes and adjustments as referenced below. In general, unless the presence of bicycles can be demonstrated to have significantly adverse impacts to resources or social conditions on the Forest, or bicycle use is prohibited by law, we support continued access for bicycles.

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. It does not contain project and activity decisions such as specific access limitations for bicycling. Any specific access limitations would be evaluated and implemented through future project-level decisionmaking which would consider impacts to resources or social conditions on the Forest. Desired conditions and guidelines for recommended wilderness provide guidance for future project-level decisions. See SA-RWild-DC-6, G-1 and 5: Mechanized recreation occurs at levels that maintain and do not detract from wilderness values. Existing structures should be maintained but not expanded to maintain the area's wilderness character. Maintenance of existing structures should be carried out in a manner that does not expand the evidence of motor vehicle and mechanized equipment use beyond current conditions to maintain the area's wilderness character. New trails should be designed for non-motorized and non-mechanized activities to preserve the area's wilderness character.

Commenter: Quintile, Anthony

Comment:

Guidelines for Pine Belt Management Area Please add the following or similar: "Work with Coconino County Parks and Recreation and other local stakeholders to develop a stacked-loop trail system emanating from Fort Tuthill County Park to address the need for large competitive non-motorized trail based events." We were participant stakeholders in the Ft. Tuthill Master Plan Revision process, and we are otherwise aware of the substantial and growing demand for larger scale competitive and participatory events that utilize trails. There are very few places that can serve as staging areas for trails-based events. Various Forest planning documents, including this one, encourage staging large events off the Forest. Ft. Tuthill provides a perfect location to stage very large events, but it lacks access to enough quantity and diversity of trails to support these events. Among the various aspects of the US Forest Service's mission exists this: "Helping States and communities to wisely use the forests to promote rural economic development and a quality rural environment." Working with CCP&R to provide a venue and trails to help accommodate large recreation events would greatly help to foster the recreation economy of Northern Arizona.

Response:

The Forest Plan provides broad guidance and information for project decisionmaking and is strategic in nature. A desired condition in the Trails section seeks to establish a trail system that is harmonious with neighboring lands and trail systems through logical connections which expand recreational opportunities. See FW-Rec-Trails-DC-1. A management approach in the Trails section addresses working with stakeholders on trail planning forestwide. It states: Collaborate with county and city trails coordinators, local groups, and area residents, when conducting trail planning. Consider needs for nonmotorized and motorized trails and provide opportunities for both. These plan components address the concern expressed in the comment without unnecessarily restricting the collaboration to the Fort Tuthill area or a particular user group.

Commenter: Raines, M.E.

Comment:

I live in Sedona, and am saddened that motorized vehicles are plaguing our landscapes. So many creatures require quiet. The noise, pollution, and degradation of our wild areas needs to be curbed. Please consider cutting back on this so-called recreational use. It ruins it for those of us who want the peace of nature.

Response:

A plan component related to this concept has been adjusted to have forestwide application and to expressly mention the desire for natural soundscapes that are consistent with ROS objectives. See FW-Rec-All DC-10.

Commenter: Raines, M.E.

Comment:

I hope you will protect our quickly disappearing wild species. Our beautiful forests and natural areas should not be used for cattle or grazing, but should be home to the birds and animals who belong here naturally.

Response:

The Forest Plan does not specify the actual amount of livestock grazing (stocking) that could occur on the Forests. Stocking decisions (amount of livestock grazing authorized) for specific grazing allotments are beyond the scope of the plan. Grazing is authorized through term grazing permits (a long term authorization subject to forestwide standards and guidelines) and an annual Bill for Collection. The annual level of livestock grazing can be reduced or adjusted in response to any site specific resources conditions within any grazing allotment under the terms and conditions of the term grazing permit. Changes to the permitted livestock numbers authorized by a term grazing permit would be made through project-level analyses. Those projects would be guided by Forest Plan components designed to protect other species and their habitats. A guideline in the Forest Plan requires livestock grazing to be managed to meet, or move towards, the desired conditions for forest resources such as soil, water, vegetation, and species. See FW-Graz-G-2. As required by the 1982 Planning Rule, the Forest reviewed the capability and suitability of domestic livestock grazing on the Forest. Additional information on the grazing capability and suitability determinations is available in the Livestock Grazing section in Appendix C of the environmental impact statement and in the Appendix I of the Rangeland Specialist Report. Based on this review, the Forest determined that 1,390,598 acres on the Forest are Lands Potentially Capable for Livestock Grazing. The Forest further determined that 1,308,276 acres on the Forest are Lands Potentially Capable and Suitable for Livestock Grazing. These determinations indicate that a large portion of the Forest is capable and suitable for domestic livestock grazing. As discussed above, decisions on actual stocking levels for any particular part of the Forest are made at the project level based on site specific information.

Commenter: Raines, M.E.

Comment:

I also hope you will prevent and restrict logging and permit old-growth trees to remain.

Response:

Timber suitability classification was conducted in compliance with the provisions of the 1982 Planning Rule and Southwestern Region planning direction (Forest Service, 2009). It is based on land availability, capability, operability, management area objectives and requirements, and the economic feasibility of the land. See the Timber Suitability Calculation section in Appendix G of the environmental impact statement and the Timber Suitability section in the Vegetation and Fire Specialist Report (Forest Service, 2015). Also see the Timber Suitability section in Chapter 4 of the Forest Plan. For any one location, the timber suitability classification is made irrespective of the current forest structure. For example, areas that are currently un-forested can still qualify as suitable for timber production, provided that the underlying land meets the requirements for availability, growing capability, operability, and economic feasibility. However, if during the forest plan revision process, specific proposed management direction is incompatible with timber production, then those affected areas will be excluded from the suitable timber base. This is the case for areas designated as developing or existing old growth under alternatives A and C. Under alternatives A and C, the standards and guidelines for old growth set forth in the current 1987 plan, as amended in 1996, would be carried forward into the new plan. In Ponderosa pine and mixed conifer forests, the emphasis under the 1987 plan is placed on creating and maintaining large stands (100-300 acres) or large aggregations of contiguous stands that all have the full suite of old growth characteristics (1987 Plan, new page 70-2; 129; 138). The effects of this proposed plan direction is fully considered in the Vegetation and Fire Specialist Report (Forest Service, 2015). Generally, within the Ponderosa pine and mixed conifer forests, the 1987 plan direction would encourage a forest structure that does not match the historic condition or the desired conditions. Larger areas with a closed canopy and a more even-age structure would occur across the landscape; yet this structure is not supported by the best available science that is specific to southwestern frequent fire forests (Reynolds et al. 2013). Alternatives B and D provide direction with regard to old growth that is based on the best available science. Under these alternatives, old growth components (e.g. old trees, snags, large logs) within frequent fire ERUs should be scattered throughout the landscape, including old tree groups and single old trees intermixed with other age classes. Occasionally, old growth components may also occur in small even-aged patch of trees. The Forest Plan provides direction to manage for well-distributed occurrences of old growth. For example, several plan components in the All Terrestrial ERUs section (FW-TerrERU-All-DC-1, 2, and 4) express desires for: Each ERU contains a mosaic of vegetation conditions, densities, and structures. This mosaic occurs at a variety of scales across landscapes and watersheds and reflects the natural disturbance regimes affecting the area. Within their type and capability, terrestrial ERUs are functioning properly and are resilient to the frequency, extent, intensity, and severity of disturbances, such as fire in fire-adapted systems, and adapt to climate variability. Natural and human disturbances provide desired overall plant density, species composition (i.e. mix of species), structure, coarse woody debris, and nutrient cycling. Desired disturbance regimes, including fire, are restored where practical. Vegetation conditions allow for inclusions and variability within the landscape as well as for transition zones or ecotones between riparian areas, forests, woodlands, shrublands, and grasslands. Transition zones shift in time and space due to factors affecting site conditions (e.g. fire, climate). Stringers persist where they naturally occur. For example, pine stringers are noncontiguous narrow communities of pine (often large old trees) that extend into lower elevation vegetation. Most importantly though, there are specific desired conditions at the landscape scale, mid-scale, and fine scale that provide for old growth forest structures in the relevant ERUs. See FW-TerrERU-PP-DC-6, 9, and 13 and FW-TerrERU-MC-MCFF-DC-2, 7, and 10. The Forest Plan also contains guidelines specifically designed to protect, perpetuate, restore, and promote old growth characteristics in these ERUs. See FW-TerrERU-PP-G-1, 2, 3, and 4, FW-TerrERU-MC-All-G-2 and 3.

Commenter: Recce, Susan

Comment:

We are strongly opposed to the recommendation in Alternative C that would close almost one-third of the NF to recreational shooters. There is no discussion or justification in the DEIS that supports the closure of an additional acre to recreational shooting, let alone over one-half million acres.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Recce, Susan

Comment:

The areas recommended for closure in Alternative C are research natural areas, botanical areas, geological areas, and wildlife habitat management areas, Walnut Canyon Management Area, Sedona-Oak Creek Management Area and Long Valley Management Area. There is no information about the degree to which each of these areas is used by recreational shooters, nor if any areas are popular areas for shooting. Neither is there any explanation as to why these areas or parts thereof are unsuitable. Further, none of these areas by their designation precludes recreational shooting.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: richter, elizabeth

Comment:

I am very opposed to having trails where one is also able to shoot guns at all, someone will be killed someday doing this. On Y20202 (I think this is the number) I have hiked this many times and had to scream at the top of my lungs that a hiker is coming when I hear shooting and find numbers of empty shells on the trail. Please have a special place for gun shooters FAR away from any trails...kids go up there and just shoot as much as they want. There should be some kind of forest services guidelines and fines for shooting in hiking areas.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions, such as prohibiting shooting near trails or designating special areas for recreational shooting. However, the Forest Plan does contain several components that provide a framework to manage recreation encounters. The All Recreation section identifies minimal user and resource conflicts as a desired condition. See FW-Rec-All-DC-6. The Trails and Trailheads section includes a guideline for recreational activities, locations, and/or settings to be managed to have minimal user conflicts. See FW-Rec-Trails-G-2. Specific determinations on whether and how to address conflicts between trail users and recreational shooters would be done through future project-level decisionmaking based on site specific information.

Commenter: richter, elizabeth

Comment:

I do support a Beaver Creek Trails system for hiking and horseback riding. There are so many trails I am not even aware of because they have not been drawn up and hiked that i would love to know about.

Response:

The Forest Plan has been adjusted in response to these comments. Desired conditions have been added to the Verde Valley Management Area that guide trail system design. See MA-VerdeV-DC-2 and 3. Also, several management approaches have been added to the Verde Valley Management Area to remind forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: rsteele@npgcable.com, Anon

Comment:

An alternative that includes the FPR, TMR and 4FR project should be considered. The FPR should be inclusive of all of these things instead of having so many separate documents/activities. Very confusing, wasteful and inefficient the way it is. * The new TMR should be delayed until the FPR and 4FR are decided/implemented. They all go together.

Response:

Forest plan revision, the Four Forest Restoration Initiative, and travel management are separate processes that are conducted at separate scales. Forest plan revision develops a management framework at a programmatic scale. The Forest Plan provides management direction for resources and activities on the Forest, including guidance for future restoration activities and changes to the transportation system. The Forest Plan provides plan components on forest resources that will provide a framework for the projects being proposed under the Four Forest Restoration Initiative. For examples, see the desired conditions, objectives, and guidelines included in the Ponderosa Pine and Mixed Conifer Ecological Response Units that will guide the projects designed under the Four Forest Restoration Initiative. The specific restoration activities are developed and evaluated in separate analysis through project-level decisionmaking, such as the 4FRI Record of Decision that covers restoration activities on portions of the Coconino and Kaibab NFs or the Rim Country project which covers portions of the Coconino, Apache-Sitgreaves, and Tonto NFs. These decisions must also be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Changes to the Coconino NF's transportation system are evaluated in separate analysis through project-level decisionmaking, such as the implementation of the Travel Management Rule (36 CFR§212). These decisions would be consistent with the National Environmental Policy Act (NEPA) and the Forest Service Handbook and Forest Service Manual. These decisions would include analysis and opportunity for public involvement. Site-specific travel management planning will use the framework set by the plan (such as desired conditions, standards, and guidelines) and will consider potential resource impacts, access needs, public input, and alternative views. If undesirable resource conditions resulted from open roads, they could be addressed through site-specific evaluation and analysis. While the forest plan does not duplicate the Travel Management Rule or the directives related to it, it is consistent with both and is meant to be used along with the directives and the motor vehicle use map. See FW-RdsFac-DC-6, O-1, S-1 and FW-Rec-Disp-S-1.

Commenter: rsteele@npgcable.com, Anon

Comment:

No new Wilderness Areas. This seems a death sentence to forested areas, as no mechanical thinning can ever be performed, thus catastrophic wildfire an eventual inevitability. In this context, some current Wilderness should be considered for change.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: rsteele@npgcable.com, Anon

Comment:

Wildlife Habitat Management areas should only be proposed if AZ Game and Fish Dept makes specific recommendations. We already have AZGFD and USF&W to do this work, please USFS don't waste time and money being redundant. So none new.

Response:

The Forest Service acknowledges that the Wildlife Habitat Management Areas included in Alternative C were not developed in coordination with the Department. The Wildlife Habitat Management Areas were included in Alternative C to respond to issues identified through scoping on the proposed plan related to noise disturbance and habitat connectivity for wildlife.

Comment:

We are disappointed with the Plan's discussion of livestock grazing. Livestock grazing produces a persistent, chronic, long-term effect on soil productivity, water quality, wildlife habitat, cultural resources, and vegetation that can take years to overcome and that is not matched by any other common use on the Coconino National Forest. It is at least implicated in (and often the central cause of) nearly every natural resource challenge from invasive weeds to declining water tables, habitat loss, soil degradation, and even fire. Yet other than mentioning livestock grazing as a largely negative effect, the Plan largely leaves any decisions about grazing up to future land managers with virtually no limits to what kinds of decisions they can make, and even goes so far as to weaken the insufficient protections the former Forest Plan provided against grazing impacts. The former Plan required monitoring surveys in its standards and guidelines section, and required annual allotment inspections. It also required the Forest Service to "maintain or enhance condition classes" and to inventory riparian areas and unsatisfactory soils.

Response:

The Forest Plan is designed to be strategic and provide a framework for project-level decisions. In general, the Livestock Grazing section only includes direction that is specifically related to livestock grazing and does not duplicate law, regulation, and policy. This should not be interpreted to mean that Forest Plan offers little guidance related to livestock grazing. As discussed in the Guiding Future Projects, Program Plans, and Assessments section in Chapter 1 of the Forest Plan, all management activities must be implemented to be consistent with the Forest Plan. Accordingly, when a decision to authorize grazing is made, it will need to be consistent with the plan components related to other resources and activities as well as the plan components in the Livestock Grazing section. Determining how to manage grazing in a particular area is a project-level decision that is guided by Forest Plan direction and site-specific information. The Livestock Grazing section in Appendix D, Other Sources of Information, has been updated with references to Forest Service Handbook direction. Monitoring would be addressed in FSH 2209.13 Chapter 90. The term Condition Class was used in the 1987 Forest Plan and referred to condition classes ranging from excellent to very poor. These classes were a subjective expression by the Forest Service of the status or health of vegetation and soil relative to combined potential to produce a sound and stable biotic community (page 66-1 in the current plan). This term is no longer in use in the Forest Service and in project-level analysis has been replaced with a more comprehensive approach to describing existing conditions, potential conditions, and desired conditions. This could vary by analysis and could include a combined description of the vegetative, wildlife, fuels, and soil resources which collectively would inform the existing condition. Riparian condition and unsatisfactory soil conditions would be one aspect of existing condition in a livestock grazing analysis. See Exhibit 1B in FSH 2209.13 Chapter 90. There are several forest-wide plan components in the Soil section that deal with unsatisfactory soil. Desired conditions describe vegetative ground cover and properly functioning soil. See FW-Soil-DC-1 and 2. Soil objectives would focus on maintaining satisfactory soil conditions and/or improve impaired soil conditions. See FW-Soil-O-1. Soil guidelines would avoid or minimize soil impacts on particularly sensitive soils or on projects that could have long term impacts to soil function and productivity. See FW-Soil-G-2 and 3.

Comment:

The new Plan seems to want to focus on "Desired Conditions" but it does not contain the same restraints on actions that the old Plan did. Desired Conditions are not a substitute for standards and guidelines, because there will always be disagreement about how to achieve the desired conditions. This Plan needs to provide more confidence that it will meet the NFMA's requirements that "it will not produce substantial and permanent impairment of the productivity of the land."

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

The Plan contains page after page of "Desired Future Conditions" for various areas and resources, but no actual plan, for getting there. Nor does it expend enough effort to show how far current conditions are departing from the desired conditions. We learn that only 44 percent of the riparian areas are meeting PFC, but the causes listed are vague and there is no explanation of how the causes will be reversed by the new Plan.

Response:

The desired conditions for riparian areas, like the desired conditions for all other resources, will guide how activities and uses authorized under the Forest Plan are designed and authorized. Desired conditions are aspirational and it is acknowledged that they may only be achievable over a long time frame. There is no specific date by which they are to be achieved. However, as described in the Plan Content section in Chapter 1 of the Forest Plan, projects and site specific activities "must be consistent with desired conditions" The following information has been added to the discussion on desired conditions in the Plan Content section to clarify the ways site specific projects can demonstrate consistency with desired conditions: To be consistent with the desired conditions of the plan, a project or activity, when assessed at the appropriate spatial scale described in the plan (e.g., landscape scale), must be designed to meet one or more of the following conditions: Maintain or make progress toward one or more of the desired conditions of a plan without adversely affecting progress toward, or maintenance of, other desired conditions; or Be neutral with regard to progress toward plan desired conditions; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward other desired conditions in a negligible way over the long term. One of the ways that the Forest Plan's promote progress towards achievement of desired conditions is through the identification of objectives. The objectives in the Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. Objectives are not targets, but projections, and they may not be fully achieved based on a variety of factors. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. The Forest Plan contains several objectives associated with riparian areas. See FW-Rip-All-O-1, FW-Rip-WtInds-O-1, FW-Rip-Spr-O-1, and FW-WFP-O-4.

Comment:

You also have eradicated many formerly binding standards. For example, when the old plan was prepared, there were Regional standards regarding riparian and watershed and soil conditions, and the 1997 Goshawk Amendments included standards regarding livestock grazing, old growth, and riparian areas that have all been eradicated. You need to address the effects of this and to take a hard look at how these changes will affect the landscape, and you need to explain why it was necessary to remove them. These were important protective measures that will no longer exist if you adopt this new plan, and NEPA requires a forthright discussion of the need to remove them, and what effects this will have.

Response:

Many of the 1987 plan standards and guidelines not carried forward into the Forest Plan duplicated law, regulation, or policy; the intent was not to repeat law, regulation, or policy in the Forest Plan. Where appropriate, 1987 plan standards and guidelines were retained, reworded, or reframed in the form of desired conditions, objectives, standards, or guidelines. Desired conditions are not just aspirations. To be consistent with the Forest Plan, projects and activities must be designed to maintain, move towards, or be neutral to desired conditions as described in Chapter 1 of the Forest Plan. While the Foundations of Forest Planning suggests that desired conditions should be able to be accomplished in 10 to 50 years, this is not a requirement under the 1982 Planning Rule. In fact, the Foundations of Forest Planning document acknowledges that longer timeframes may be used. USDA Forest Service, Foundations of Forest Planning, Volume 1 (Version 3.1) at 10 (Oct. 2008). Chapter 1 of the Plan also explains that standards and guidelines are not discretionary. Standards are constraints upon project and activity decisionmaking. A project or activity must be consistent with all standards applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a standard in only one way; it is designed in exact accord with the standard. Variance from a standard is not allowed except by plan amendment. A project or activity must be consistent with all guidelines applicable to the type of project or activity and its location in the plan area. A project or activity is consistent with a guideline in either of two ways: (1) it is designed exactly in accord with the guideline; or (2) it varies from the exact words of the guideline, but it is as effective in meeting the intent of the guideline to contribute to the maintenance or attainment of the relevant desired conditions and objectives. Guidelines must be followed, but they may be modified for a specific project if the intent of the guideline is followed and the deviation is addressed in a decision document with supporting rationale. However, when deviation from a guideline does not meet the original intent, a plan amendment is required. Finally, in response to these concerns, the Forest Service has prepared a Crosswalk between Coconino 1987 Forest Plan (as amended) and the Revised Forest Plan, which has been appended to the Final EIS. This appendix, while not an exhaustive account of all plan direction, tracks plan elements relevant to issues that drove the plan revision process, and/or were highlighted in appendix A (Response to Comments). The effects of removing or modifying standards put forth in the 1987 forest plan are analyzed in chapter 3 of the environmental impact statement, which discloses the effects of Alternative A (the 1987 forest plan) compared to alternatives B (modified), C, and D.

Comment:

We have seen and reviewed the comments submitted by Friends of Anderson Mesa, and share the concerns in those comments regarding capability and suitability. We do not believe adequate effort has been shown to estimate capacity or suitability in this plan, particularly given the fact there has been a Plan in place for decades and there is no complete analysis of the current conditions of the landscape with respect to livestock grazing.

Response:

The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. Capability is the potential of an area of land to produce resources and supply goods and services. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology. These have not changed significantly since the evaluation done for the 1987 plan. Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. A unit of land may be suitable for a variety of individual or combined management practices. Lands identified as suitable for livestock grazing indicates that grazing is compatible with the desired conditions and objectives in the plan area. In forest planning, Section 219.20 of the 1982 planning regulations requires a determination of the lands potentially capable and suitable for livestock grazing. To make this determination, the forest started with the total acres on the Coconino National Forest and removed 452,367 acres of lands not potentially capable for livestock grazing. The process for identifying the lands not potentially capable for livestock grazing is described above in the section entitled “Determination of Lands Capable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. This revealed that 1,390,598 acres on the Coconino NF are Lands Potentially Capable for Livestock Grazing. Next, the Forest removed 82,322 acres of lands that were not suitable for livestock grazing that had been identified as potentially capable. The process for identifying the lands not suitable for livestock grazing is described above in the section entitled “Determination of Lands Suitable for Livestock Grazing” in the Livestock Grazing section in Appendix C of the Final Environmental Impact Statement. Some of the acres that have been identified as not suitable had also been identified as not potentially capable. Approximately 152,934 acres of not suitable land had already been removed because they were not potentially capable, and therefore were not part of the Lands Potentially Capable for Livestock Grazing. To avoid double counting these acres, the total lands determined to be currently not suitable were reduced by 152,934 acres. After the lands not potentially capable and not suitable have been removed from the total acres on the Coconino National Forest, the remaining land is potentially capable and suitable for livestock grazing. Through this process, the forest has determined that there are 1,308,276 acres on the forest that are potentially capable and suitable for livestock grazing. The identification of lands suitable for livestock grazing within the Forest Plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long and short term monitoring are used to determine yearly stocking rates, pasture rotations, and whether other adjustments are needed in order to meet management objectives and desired conditions for rangelands.

Commenter: Ryberg, Erik

Comment:

The proposed Plan does not contain any requirements that the Forest Service survey areas for satisfactory or unsatisfactory conditions and report their findings. Soil, watershed, vegetation, and riparian areas need to be evaluated in individual allotment analyses for their condition and the Forest Service must confront any shortcomings that are found. It is not enough to say an area is or is not meeting its Desired Conditions, because the reality is most areas will not be. Analyzing the "Existing Condition" is just as important as hopeful consideration of some future "Desired Condition" and is needed if there is to be a coherent plan to achieve the desired condition. The Plan must require this analysis or it will not be done.

Response:

No change has been made in response to this comment. Consideration of existing conditions and comparison of those conditions with desired conditions is an integral part of every decision the Forest Service makes. This process is how the Purpose and Need, the proposed action, and alternatives are developed for every project or authorized activity. This process is already governed by the National Environmental Policy Act and Forest Service regulations and policy.

Commenter: Ryberg, Erik

Comment:

One Desired Condition is that "Rangelands provide large areas of unfragmented open space." Can you please explain this desired condition? How would rangelands fail to do this? How is range management to be affected by this condition? What would be an example of this desired condition affecting a grazing decision in some fashion?

Response:

This statement has been removed from the Livestock Grazing section because the concept of fragmentation and open space is not limited to grazing management. For example, the Forest Plan includes a desired condition for a mostly contiguous land base where open space values are retained. See FW-LndAdj-DC-1. Fragmentation and connectivity of aquatic, riparian, and riparian resources are also addressed in the Forest Plan. For examples, see FW-Rip-All-DC-3 and FW-TerrERU-Grass-All-DC-3.

Commenter: Ryberg, Erik

Comment:

We share Friends of Anderson Mesa's concern that you have not addressed an adequate range of alternatives. This plan calls for, in some ways, reducing current protections offered to wildlife, watershed, soils, range, vegetation, and riparian areas, but you do not discuss this in your evaluation of the "No Action" alternative, and your three action alternatives all offer the same protection to these resources. You need to have an alternative that increases protection for these resources, particularly in light of the climate change challenges you highlight. This alternative would not simply allocate more areas to wilderness or recreation but would offer greater protections in the form of more restrictive standards and guidelines.

Response:

The response to this comment will be prepared as the Final Environmental Impact Statement (FEIS) is being prepared. The response will be included as part of an appendix to the FEIS.

Commenter: Ryberg, Erik

Comment:

We ask that the DEIS and plan be significantly revised and a second DEIS released for public comment prior to a final.

Response:

The Coconino NF followed the public participation requirements outlined in the National Environmental Policy Act, National Forest Management Act, and provisions of the 1982 Planning Rule to develop the proposed plan, alternatives, and a draft environmental impact statement. These documents were made available for review during a 90-day public comment period. The public comments received on the proposed plan, the alternatives, and the draft environmental impact statement have been used to make adjustments to the proposed plan, the alternatives, and the environmental impact statement. The adjustments were not substantial enough to merit publication of a supplemental or revised environmental impact statement or conduct another comment period.

Commenter: Ryker, Bill

Comment:

I believe you should have Soldiers Pass managed as follows: 1. Red Rock Jeep drop amount of jeeps at a time to 5 2. Double Red Rock Jeeps annual permit This would help the trail - as Red Rock does maintenance and would make some sense for traffic flow.

Response:

The Forest Plan is not the appropriate document in which to classify the maintenance level for specific roads or determine their need for maintenance. Likewise, the Forest Plan also does not make specific decision on traffic management. Rather, the Forest Plan provides direction for the management of the transportation system on the Forest. For example, the Roads and Facilities section includes a desired condition for the Forest to have a well-maintained road system. See FW-RdsFac-DC-1. Decisions on which maintenance level to assign to a road are administrative determinations made as part of the management of the transportation system. Decisions on when and where to conduct maintenance are made based on site-specific information and analysis and appropriated budgets for that activity. Prioritization of road maintenance planning is outside the scope of the Forest Plan and the plan revision process. Maintenance planning is a requirement of Forest Service Manual 7732.11 that requires the forest to: Develop annual road maintenance plans based on road management objectives and expected traffic for all National Forest System Roads. Clearly display the allocation of available funds in highest priority order in road maintenance plans in case of funding short falls.

Comment:

Watershed Chap 2 Page 18 FW- WtrShd-obj There lacks any reference to management of grazers on the overall watershed plan climate change. These are two interrelated impacts that need verifiable management objectives within a 10 year metric. Aside from cattle, USFS managers need to better define elk population numbers in coordination with AZ Game and Fish. Beschta R. L, Donahue D.L. DellaSala D.A, Rhodes J.J., Karr J.R. O'Brien M. H., Fleischner M. and Williams C.D 2013. Adapting to Climate Change on Western Public Lands: Addressing the Ecological Effects of Domestic, Wild, and Feral Ungulates 51:474-491. Yongguang Z Moran S Nearing M., Campos G., Huete A. Anthony R. Buda A. Bosch D. Gunter S., Kitchen S., McNab ., Morgan J., 2013. Extreme precipitation patterns and reductions of terrestrial ecosystem production across biomes. Journal of Geophysical research: Biogeosciences. 118; 148-157. Maschinski J. Baggs J., Quintana-Ascencio P., Menges E., 2006. Using Population Viability Analysis to Predict the Effects of Climate Change on the Extinction Risk of an Endangered Limestone Endemic Shrub, Arizona Cliffrose. Conservation Biology. 20; 218-228.

Response:

No change has been made to this objective in response to this comment. The intent of the objective is to seek to improve conditions in priority 6 watersheds, not to address one possible factor that could be impacting the watersheds. This ensures that the most important watersheds receive attention over the life of the plan regardless of the reasons for their impairment. Moving watersheds toward desired condition is one way the Forest is addressing climate change. Watersheds in desired condition should be more resilient to the anticipated effects of climate change. The management of permitted livestock grazing is generally discussed in the Livestock Grazing section. Plan components in that section include a desired condition for permitted livestock grazing to be consistent with the desired conditions for other resources (which would include Watershed) and a guideline to managed to meet, or move towards, the desired conditions for forest resources such as soil, water, vegetation, and species. See FW-Graz-DC-2 and FW-Graz-G-2. How domestic livestock grazing will be conducted in any particular area will be based on site-specific information and analysis. Grazing is also addressed in FW-TerrERU-Grass-G-2. The Plan addresses other grazers in the Wildlife, Fish, and Plants section, which includes a desired condition for forest activities to support sustainable populations of native plant and animal species distributed throughout their potential natural range. See FW-WFP-DC-1. This section also includes a management approach regarding coordination with the Arizona Game and Fish Department to manage wildlife populations for the maintenance and improvement of elements of watershed condition. It states: Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity.

Commenter: Shannon, Joe

Comment:

High elevation forests Chap 2 p66 Mixed Conifer Types FW-Veg-MC-MCFF-O Objective 1 - Tens years following plan approval is much too slow. The Citizens of Flagstaff double taxed themselves to maybe prevent another Shultz Fire on the west of Mt.Elden. More severe conditions exist farther up-stream in the Rio DeFlag drainage,that could have similar long- term impacts on Flagstaff. St. Clair S.B., Cavard X., and Bergeron, Y. 2013. The role of facilitation and competition in the development and resilience of aspen forests. Forest Ecology and Management. 299; 91-99. Vankat J. 2011. Post-1935 changes in forest vegetation of Grand Canyon National Park, Arizona, USA: Part 2-Mixed conifer, spruce-fir, and quaking aspen forests. Forest Ecology and Management. 261; 326-341

Response:

The objectives in the Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, the objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. The Forest Plan also includes treatment objectives for the ponderosa pine ERU, which could result in additional treatment in the upper portion of Rio de Flag drainage. See FW-TerrERU-PP-O-1, 2, and 3. The Forest Plan also provides a comprehensive framework for management of the wildland urban interface. See FW-WUI section.

Commenter: Shannon, Joe

Comment:

Also much of the recreation use and regulation is dependent on enforcement, which is near zero on the Coconino National Forest. Illegal trail building, night motorcycle riding on closed trails, and bicycling in wilderness area are very common activities because the offenders know they will not be caught. Recreational impacts are growing, but no limits are indicated by the responsible agency.

Response:

No change to the plan has been made in response to this comment. Enforcement is not a forest plan component but is a requirement of the Agency, regardless of the land management plan in effect.

Comment:

Lacks confirmable management objectives linked to monitoring metrics. More simply; too much jargon not enough repeatable data. There is not a sense of urgency in plan implementation that climate change and out of controlled wildfires from decades of poor management and leadership has created.

Response:

Chapter 1 of the Forest Plan states that the nature of the Forest Plan is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., climate change) and it is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Climate change is addressed in numerous locations in the Forest Plan. For example, adaptability and resiliency to climate change is mentioned in desired conditions in FW-Eco-DC-1, FW-Soil-DC-2, FW-Water-DC-3, and FW-TerrERU-All-DC-2 and 4. Drought is mentioned as a natural disturbance in desired conditions in the All Ecosystems, Constructed Waters, and Grasslands sections (see FW-Eco-DC-1, FW-ConstWat-DC-2, and FW-TerrERU-Grass-DC-8) and in the General Description and Backgrounds for the sections on Stream Ecosystems, Wetlands, Riparian Forest Types, and Desert Communities. An exceptionally severe or extended drought could be an emergency situation, much like a wildfire, and site-specific responses could be generated at the forest or regional level or in collaboration with cities and counties, depending on the circumstances. Plan language is focused on planned activities and uses, not emergencies. In addition, plan language for the growth, maintenance, and protection of large, old trees is in numerous Plan locations including FW-TerrERU-DC-PP-6, 7, 9, G-1, 2, 4, and a pre-settlement tree strategy in G-3; FW-TerrERU-MC-MCFF-DC-2, 4; FW-TerrERU-MC-MCA-DC-2, 4; FW-TerrERU-MC-All-G-2, 3; and FW-TerrERU-DC-SF-2, 4, and 11. Two management approaches regarding climate change have been added to the All Terrestrial Ecosystems section in response to these comments. These management approaches remind forest managers to: In areas of high vulnerability to climate change, consider the following approaches to facilitate natural adaptation to changing conditions. Because many early-mid species or species characteristic of lower life zones are adapted for warmer and drier conditions, emphasize early-mid seral species or species from lower life zones over late-seral species and species of higher life zones. Consider managing tree basal area at the low end of the range of desired conditions to mitigate water stress. Coordinate with federal, state, and local entities, and other stakeholders regarding climate change research, trends, impacts, and adaptive strategies. Habitat conditions, including resiliency and adaptability to climate change and climate variability, is the key link between species, climate change, habitat, and monitoring. A coarse filter/fine filter approach was used to evaluate species. Each evaluated species was associated with its primary habitat (the coarse filter), and primary threats to the habitat were identified. Threats to the habitat constitute a threat to the species. Fine filter species-specific threats (such as disease) were also identified. This coarse filter/fine filter process was used to help develop and refine desired conditions, standards, and guidelines for the Forest Plan. Species specific plan direction was developed where needed for threats which the Forest Service could impact through management and for which the Forest Service has jurisdictional control. This is discussed in detail in the Final Environmental Impact Statement. Monitoring and evaluation are required by the 1982 Planning Rule provisions. The purpose is to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate. Based upon this evaluation, recommendations may be made to the Forest Supervisor to change management direction, or revise, or amend the forest plan. A required monitoring and evaluation report is intended to inform adaptive management of the Forest plan area, especially in light of changing social or environmental conditions. The Forest Supervisor annually evaluates the monitoring information displayed in the evaluation reports through a management review and determines if any changes are needed in management actions or the plan itself. In general, annual evaluations of the monitoring information consider the following questions (note that the third bullet has been modified to specifically bring attention to climate change): What are the effects of resource management activities on the productivity of the land? To what degree are resource management activities maintaining or making progress toward the desired conditions and objectives identified in the plan? Have there been unanticipated changes in conditions? Can changes be attributed to climate change? What modifications are needed to account for these changed conditions? In addition to annual monitoring, the Forest Supervisor reviews the conditions on the land covered by the Forest Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly. The plan is ordinarily revised on a 10 to 15-year cycle and the Forest Supervisor may amend the plan at any time. The Monitoring Plan in the Forest Plan has questions that relate to climate

change and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of climate change are hindering progress toward desired conditions. Two monitoring items have been added in response to these comments. One is related to water rights and water right filings, and the other would track peak flows and annual flows for three of our major streams. In addition, climate change and drought related impacts can be derived from several items in the Monitoring Plan. Increased fires or fugitive dust facilitated by drought could impact air quality, or visibility in Class I areas (Questions 1 and 2). Drought or climate change could result in increased tree mortality which would be monitored in Question 4 which focuses on the frequency of snags and downed logs. The question regarding an increase in uncharacteristic insect or disease outbreaks could point to impacts from drought or climate change. Finally, the question which tracks plan amendments resulting from unforeseen events, could reflect changes in response to drought or climate change as well.

Commenter: Shannon, Joe

Comment:

I could not find anything on forest closure criteria or changes in campfire regulation. For example, this year we need to keep the winter road closure in effect until the monsoons begin and stop campfire today. The new weather we have with May/June humidity's <10% dictate a new management criteria needs to be used but none is mentioned.

Response:

The Forest has an existing policy and process to address when to close the forest and ban campfires based on specific existing conditions. Although the Forest Plan does not repeat this policy nor does it provide a specific seasonal closure for campfires, it does contain a guideline requiring recreational activities to be managed to promote public health and safety. See FW-Rec-All-G-2. The existing policy and process are consistent with this guideline and can be viewed as an extension of this guideline.

Commenter: Stafford, Bill

Comment:

Use the "Beaver Creek Trails Plan" developed by the Beaver Creek Trails Coalition and the Montezuma Homeowners Association as a guide for future trail and trail head planning efforts. (Refer to map in the Beaver Creek Trails Plan.)

Response:

The Forest Plan has been adjusted in response to these comments. Desired conditions have been added to the Verde Valley Management Area that guide trail system design. See MA-VerdeV-DC-2 and 3. Also, several management approaches have been added to the Verde Valley Management Area to remind forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Stafford, Bill

Comment:

Expand partnerships with neighborhoods to promote trail and resource stewardship to obtain assistance in trail maintenance and planned trail construction.

Response:

The suggested management approach has not been added to the management area that encompasses Beaver Creek because similar language already exists in the forestwide Trails section of the Forest Plan. It states: Maintain and expand volunteer partnerships with local communities, organizations, groups, and agencies to assist in trail planning, construction, and stewardship.

Commenter: Stafford, Bill

Comment:

Provide "Tread Lightly" and "Leave No Trace" training for residents and youth in partnership with the Beaver Creek School, Arizona State Parks OHV Ambassador Program, the Beaver Creek Trails Coalition, the Beaver Creek Kiwanis Club, Yavapai County. This is needed to reduce OHV damage to the area.

Response:

The "Tread Lightly" and "Leave No Trace" concepts have been addressed in a forestwide desired condition, which applies to the Beaver Creek area. See FW-InterpEd-DC-1. A management approach in the Interpretation and Education section also provides the following suggestion: Share Leave No Trace and Tread Lightly concepts and practices in forest interpretation and visitor education.

Commenter: Stafford, Bill

Comment:

Riparian The condition of Russell, Deer Run and Winter Cabin Springs improve, riparian tree roots are not exposed and gully cutting stops in those areas. Riparian areas along Beaver Creek, Dry Beaver Creek, Walker Creek and Red Tank Draw continue to be healthy.

Response:

The desired conditions for riparian areas have been addressed in forestwide direction. See FW-Rip-All-DC-1 and 5. See also plan components in the forestwide direction for All Riparian Areas Stream Ecosystems, Wetlands, Springs, and Riparian Forest Types. Although a Beaver Creek Management Area has not been identified as part of the Plan, in response to your comments the Verde Valley Management Area plan components were reviewed, edited, and augmented. For example, a guideline has been added to the Verde Valley Management Area requiring projects and activities to be designed and implemented in a manner that maintains or improves watershed and riparian function. See MA-VerdeV-G-1.

Commenter: Stafford, Bill

Comment:

Methods of creating and maintaining user-friendly trails include: providing well-defined trails that encourage people to stay on designated routes, providing orientation maps, designing trails that provide a reasonable degree of access, and having trail markers and defining trail edges. Obliterate and re-vegetate un-needed user created roads and trails.

Response:

The suggested management approach has not been added to the Forest Plan. The agency already has comprehensive guidance on the creation and maintenance of trails. See FSH 2309.18, 4 - Trail Operation and Maintenance. It is unnecessary to duplicate or supplement that guidance in the Forest Plan. A reference to FSH 2309.18, 4 is included in the Forest Plan in the Dispersed Recreation, Trails and Trailheads section in Appendix D, Other Sources of Information.

Commenter: Stafford, Bill

Comment:

Work with the local community to provide opportunities for developed and dispersed recreation including camping. The closure of the Beaver Creek Campground and the Bull Pen Dispersed Camping areas have severely limited camping opportunities in the vicinity of Water in our Community.

Response:

The Forest Plan has been adjusted in response to this comment. Although a separate management area has not been created for the Beaver Creek area, several management approaches relating to recreation have been added to the Verde Valley Management Area, the management area that encompasses the Beaver Creek area. These management approaches remind forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Similar language can be found in the forestwide All Recreation section of the Forest Plan, where a management approach reminds forest managers to: Collaborate with state and federal agencies including National Park Service, Arizona State Parks, AZGFD, concessionaires, chambers of commerce, nonprofit organizations, Northern Arizona University, state, city and county governments, recreation stakeholders, local communities and citizens, partners and volunteers regarding provision of recreation opportunities in Northern Arizona and communicating these to the public. Work in partnership to find creative solutions to operate and maintain recreation sites, trails and trailheads, and provide interpretive and environmental education. Determine gaps and overlaps in opportunities and resolve conflicts between users, and providers. Work together to determine activities that increase our capacity to serve a diverse population while promoting social, economic and natural resource sustainability. The forestwide Trails and Trailheads section of the Forest Plan also contains a relevant management approach, which reminds forest managers to: Coordinate trails and trailhead parking with future development on adjacent lands so as to be proactive in designing trails and trailheads to maintain access to public lands and protect resources.

Commenter: Stafford, Bill

Comment:

Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well.

Response:

A management approach has been added to the Verde Valley Management Area section of the revised Plan in response to this comment. The management approach states: Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well.

Commenter: Stafford, Bill

Comment:

Develop partnerships with the Montezuma Castle National Monument including the Montezuma Well Unit, Yavapai County, the Lake Montezuma Property Owners Association, the Beaver Creek Trails Coalition, the M Diamond Ranch and the V Bar V Ranch {University of Arizona} to develop transportation solutions that reduce traffic and vehicle impacts at high impact recreation areas on the forest.

Response:

Two management approaches have been added in the Verde Valley Management Area in response to this comment. It reminds forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation.

Commenter: Stafford, Bill

Comment:

Work with the Arizona State Parks including the ASP OHV Program, the Beaver Creek Trails Coalition, the Beaver Creek Kiwanis Club and Yavapai County to obtain grants for the planning and construction of motorized and non-motorized trails including historic trails such as the Hollingshead Trail and the Chaves Trail. This can be completed to address issues and concerns related to the Travel Management Rule Implementation which left the FR 9202Y road as the only available motorized back country route surrounding the Rimrock and Lake Montezuma Area.

Response:

A management approach has been added to the Verde Valley Management Area section of the Forest Plan in response to this comment. The management approach states: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts.

Commenter: Stafford, Bill

Comment:

Watershed and Soil Water volume and turbidity is reduced by healthy watershed conditions. Soil erosion is reduced particularly in the Russell Wash and Wickiup Wash Areas.

Response:

The topics of water volume, turbidity, and soil erosion have been addressed in forestwide direction. See FW-Water-DC-2, 3, 5, 6, and 7 and FW-Water-G-4. See also plan components in the forestwide direction for All Riparian Areas and Stream Ecosystems. Although a Beaver Creek Management Area has not been identified as part of the Plan, in response to your comments the Verde Valley Management Area plan components were reviewed, edited, and augmented. For example, a desired condition has been added to the Verde Valley Management Area that guides management of watersheds to reduce the risk of uncharacteristic flooding and sedimentation, including in the Beaver Creek watershed. See MA-VerdeV-DC-1.

Commenter: Stafford, Bill

Comment:

The prehistoric, historic, and settlement history of the Beaver Creek Area is an integrated part of interpretive programs throughout the area. The relationship between the landscape of the forest and nearby national monuments is highlighted.

Response:

Although a Beaver Creek Management Area has not been identified as part of the Forest Plan, in response to your comments the Verde Valley Management Area plan components were reviewed, edited, and augmented. For example, additional information on the prehistoric, historic, and settlement history of this area has been added to the General Description and Background for the Verde Valley Management Area. The desired condition for the prehistoric, historic, and settlement history of the Verde Valley to be an integrated part of interpretive programs throughout the area has been retained. See MA-VerdeV-DC-5. Additional guidance on interpretation is located in the forestwide Interpretation and Education section. There is also forestwide direction in Heritage Resources to emphasize the interpretation of human history on the forest to promote greater public understanding and appreciation of the prehistoric and historic cultures and communities. See FW-Hrtg-DC-5, 7, 8 and 12.

Commenter: Stafford, Bill

Comment:

Recreation opportunities in the Beaver Creek Management Area are abundant and cover a wide range of development levels.

Response:

The topic of recreation opportunities has been addressed in forestwide direction. See FW-Rec-All-DC-2, 3, and 4, FW-Rec-Dev-DC-1, FW-Rec-Disp-DC-1, and FW-Rec-Trails-DC-1 and 2. Although a Beaver Creek Management Area has not been identified as part of the Plan, in response to your comments the Verde Valley Management Area plan components were reviewed, edited, and augmented. For example, desired conditions have been added to the Verde Valley Management Area that guide access to recreational opportunities and trail system design. See MA-VerdeV-DC-2 and 3. Several management approaches have been added to the Verde Valley Management Area to remind forest managers to: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Stafford, Bill

Comment:

Dispersed Recreation Relatively quiet,easily accessed national forest supports wildlife, scenic viewing and experiencing nature. A system of trails and pathways,both motorized and non-motorized surrounds the Rimrock,Lake Montezuma and McGuireville areas. A reasonable number of motorized trails and opportunities will provide the many OHV users in the area with motorized recreation opportunities so that "OHV Ambassadors" and volunteers can work with motorized users to "tread lightly" on the land and reduce the proliferation of user created routes. A system of motorized trails moves motorized users away from residents and into outlying areas while a system of non-motorized trails is developed closer to residential areas. Trailheads including "Primary,Secondary and neighborhood links" reduce user conflicts with private landowners and efficiently and effectively move visitors through and away from residential areas and private land. Damaged OHV areas are restored with priority given to sites adjacent to the Wickiup Mesa portion of Lake Montezuma (Forest Glenn Road area),Russell Wash and areas around Montezuma Well National Monument. Volunteer partnerships have high resident participation and provide opportunities for exciting stewardship and a strong learning component.

Response:

The topic of recreation opportunities has been addressed in forestwide direction. See FW-Rec-All-DC-2, 3, and 4, FW-Rec-Dev-DC-1, FW-Rec-Disp-DC-1, and FW-Rec-Trails-DC-1 and 2. Although a Beaver Creek Management Area has not been identified as part of the Plan, in response to your comments the Verde Valley Management Area plan components were reviewed, edited, and augmented. For example, desired conditions have been added to the Verde Valley Management Area that guide access to recreational opportunities and trail system design. See MA-VerdeV-DC-2 and 3. Several management approaches have been added to the Verde Valley Management Area to remind forest managers to:Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation.Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well.Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Stafford, Bill

Comment:

Scenery Natural landscape is highly valued by local residents and visitors. National Forest System lands provide the backdrop for the community's character while accommodating features that are more typical of a rural setting. Infrastructure and developments that serve a broad public interest are sometimes evident but still subordinate to the landscape.

Response:

The topic of scenery has been addressed in forestwide direction in the revised Plan. See FW-Scenic-DC-1 and 2. Although a Beaver Creek Management Area has not been identified as part of the revised Plan, in response to your comments the Verde Valley Management Area plan components were reviewed, edited, and augmented. The desired conditions for scenery in the Verde Valley Management Area have been addressed in the same manner as other management areas, which incorporate the descriptions included in the Landscape Character Descriptions document that the Forest prepared for the entire Coconino National Forest. See MA-VerdeV-DC-6.

Commenter: Stafford, Bill

Comment:

GENERAL DESCRIPTION OF THE BEAVER CREEK MANAGEMENT AREA The Beaver Creek Management Area is predominantly Semidesert Grasslands, Pinyon-Juniper Woodlands and Riparian. It is characterized and defined by the beautiful free flowing Beaver Creek perennial Beaver Creek and the perennial portions of Walker and Dry Beaver Creeks. It is further defined by many intermittent streams including the Riparian Areas along Dry Beaver Creek, Walker Creek, Red Tank Draw and Russell Wash. The area has a continuous history of human occupation and comprised the southern Sinagua culture area until A.D. 1400 as highlighted by Montezuma Castle, Montezuma Well, Sacred Mountain, V Bar V Rock Art Area and numerous large Pueblos spaced approximately 1.6 miles apart along the rim of Beaver Creek. The Beaver Creek Area has a long history of prehistoric and historic settlement as highlighted by national monuments and historic trails within the forest's administrative boundary. It is also characterized by a ranching history including portions of the Historic V Bar V, Ward, Bar D, Apache Maid and M Diamond Ranches. The Beaver Creek MA is Rimrock, Lake Montezuma and McGuireville's "Back Yard" as it is next to many residential areas, sections of Interstate 17, the Cornville Road, the Montezuma Well Road and a several mile stretch of Beaver Creek.

Response:

Although a Beaver Creek Management Area has not been identified as part of the Forest Plan, in response to your comments the General Description and Background for the Verde Valley Management Area was reviewed, edited, and augmented. For example, general description information has been added to the Verde Valley Management Area that highlights some of Beaver Creek's contributions to this management area.

Commenter: Stafford, Bill

Comment:

The Beaver Creek Area deserves it's own Management Area. The Beaver Creek Management Area boundaries would be bounded by FR 618C and FR 214 on the south, The rim (lower rim bordered by Hollingshead Point, Walker Mtn. and Deadwood Mesa to the Wet Beaver Creek Wilderness) on the east, Hwy. 179 to Dry Beaver Creek on the north, Dry Beaver Creek and the Cornville Road on the west and back to the junction of FR 618C where meets the Montezuma Castle/Page Springs Highway on the south. This Management Unit will address the desired conditions, management approaches, standards and guidelines of the Beaver Creek Area including National Forest Lands surrounding Montezuma Well and Castle National Monuments, Beaver Creek and the Beaver Creek Recreation Area, Lawrence Crossing Recreation Site, Dry Beaver Creek, Rimrock, Lake Montezuma, McGuireville, Russell Wash and Spring, M Diamond, Walker Creek, Sacred Mountain and the V Bar V Rock Art Site. This Management Area would not be a Neighborwoods Management Area but would include some of components of one to address the desired conditions needed for National Forest Lands surrounding the Rimrock/Lake Montezuma and McGuireville Areas. This MA would encompass the lower parts of the Beaver Creek watershed including major portions of the Russell Wash, Walker Creek, Red Tank and Dry Beaver Creek watersheds.

Response:

A separate Beaver Creek Management Area has not been added to the revised Plan. The Beaver Creek area is still included within the Verde Valley Management Area. Although a separate management area was not created for the Beaver Creek area, the language suggested for the new management area was reviewed and incorporated whenever appropriate into the Verde Valley Management Area. See MA-VerdeV-DC-1, 2, 3, and 4, MA-VerdeV-G-1, 2, and 3, and the following management approaches: Collaborate with organizations and groups such as Arizona State Parks (including the Arizona State Park Off Highway Vehicle Program, Yavapai County, local organizations and groups, such as the Beaver Creek Trails Coalition, Beaver Creek Kiwanis Club, and the Montezuma Homeowners Association, during non-motorized and motorized trail and trail head planning and construction efforts. Work with stakeholders to develop collaborative solutions to problems that arise from high use recreation. Collaborate with the Montezuma Castle National Monument Staff to better meet visitor needs and protect resources in the vicinity of Montezuma Castle and Montezuma Well. Collaborate with Arizona State Parks to better meet visitor needs and protect resources in the vicinity of Deadhorse State Park.

Commenter: Stafford, Bill

Comment:

Vegetation and Range Condition Species diversity increases in both the understory and over story vegetation. Native vegetation including native grasses increase while non-native species decrease. Percent of soil cover increases. Range conditions improve with less invasion of Snakeweed, Cheat grass, oak brush and Pinyon and Juniper. Fire is re-introduced into the Watershed to reduce the invading species. Wildlife habitat improves.

Response:

The topics of vegetation, range condition, and invasive species have been addressed in forestwide direction. For guidance on vegetation conditions, see the plan components in the forestwide direction for All Ecosystems, Riparian Areas, and Terrestrial Ecological Response Units. For guidance on invasive species, see the plan components in the forestwide direction for Invasive Species. Direction in the Verde Valley Management Area also addresses watershed condition., riparian function, native and invasive species. See MA-VerdeV-DC-1, G-1.

Commenter: Starr, Belle

Comment:

As I look at the recently issued document and the four alternatives, I don't see any provisions for repairing the damage done to forest/community relations caused by Nora Rasure's decision years ago to allow the Snowbowl ski resort to make artificial snow from reclaimed wastewater. I've been a witness again and again to the damage caused by her ruling: a meeting of tribal elders and medicine people in which grown Native American men cried openly about the decision; the pain in the faces of my Hopi friends when they discuss Rasure's act; the repeated efforts on the part of activists and tribal leaders to fight the decision; and our pain as the legal system (in which there were no Native American judges) reinforced Rasure's action again and again.

Response:

The Forest Plan does not authorize the use of reclaimed water for snowmaking or any other particular use. The Forest Plan establishes plan components that will guide decisions on projects and activities that are made after it is in effect. For example, the revised Forest Plan includes desired conditions for watersheds to be functioning properly and to exhibit high geomorphic, hydrologic, and biotic integrity within their inherent capability. See FW-Water-DC-1 and 2. A desired condition for the Alpine Tundra ERU seeks to maintain the attributes and processes that contribute to the ecological diversity and habitat for native biota in the ERU. See FW-TerrERU-AT-DC-1. New decisions on the use of reclaimed water for snowmaking will need to be consistent with these desired conditions and all of the other guidance in the Forest Plan. Past decisions are outside the scope of the plan. The effects of existing authorizations for snowmaking and use of reclaimed water on alpine tundra and the species and cultural values associated with alpine tundra were analyzed in the decision to authorize use of reclaimed water and snowmaking.

Commenter: Starr, Belle

Comment:

Again, in your own words: The most valuable resource for life in the desert Southwest is water. At the core of almost every Southwestern tribe's culture, religion, and value system is water, and most tribes see the San Francisco Peaks as the single, pre-eminent source of all water, and, therefore, all life. To them, snowmaking is an intrusion into the natural order and an invasion into realms that only higher powers are responsible for. The Snowbowl decision is seen by the tribes as yet another effort by the government to further erode their culture, and without their culture, they can no longer exist as a people. The Snowbowl decision destroyed a relationship that was built up over 25 years between the Forest and the tribes working together as colleagues with a shared stewardship responsibility. It has undercut the credibility of the Forest Service with Indian people and has created a breach that will be very difficult to restore.

Response:

The Forest Plan does not expressly declare snowmaking as an incompatible use on the Forest. However, the Forest Plan does contain several components that provide a framework that can be applied to protect the limited water resources in this region, the federally listed endangered San Francisco Peaks Ragwort, and the San Francisco Peaks Traditional Cultural Property. The Watersheds and Water section includes desired conditions to sustain water quantity (base flows) of intermittent and perennial streams within the historic range of variability. See FW-Water-DC-5. Water quality and water quantity is desired to be at levels that support ecological functions, habitat for aquatic and riparian species, and water sources for municipalities, and, at levels that retain the biological, physical, and chemical integrity of associated systems and benefit survival, growth, reproduction, and migration of native species. See FW-Water-DC-6. Finally, it is a desired condition for water quality to meet or exceed Arizona water quality standards and support identified designated beneficial uses. See FW-Water-DC-7. To be consistent with the Forest Plan, a proposed activity must be consistent with these desired conditions or a forest plan amendment would be required to authorize the activity. The Forest Plan includes a desired condition for habitat conditions to contribute to the survival and recovery of listed species and contribute to the delisting of species under the Endangered Species Act. See FW-WFP-DC-2. As with the concerns with water quantity and quality, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. The Forest Plan also includes a desired condition for traditional cultural properties to be preserved and protected for their cultural importance. As with the concerns with water quantity and quality and endangered species, a proposed activity must be consistent with this desired condition or a forest plan amendment would be required to authorize the activity. Accordingly, the strategic approach employed by the Forest Plan provides guidance relevant to the concerns expressed in these comments without being overly prescriptive and dismissing an activity without considering it at the project level where site specific information can inform the decision.

Commenter: Sullivan, Eugenia

Comment:

After reviewing all proposals, I favor Plan C with stronger standards and guidelines. There are plenty of roads for all vehicles. I have enjoyed driving in the Coconino National Forest for many hours at a time without seeing other human beings. Since these roads exist in abundance, I do not believe we need more; rather we need more protected wilderness areas.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Sullivan, Eugenia

Comment:

The Forest Service should re-introduce wolves as a keystone species in order to revitalize the wilderness areas. Wolves prevent overgrazing of these habitats. For example, the aspen groves of the West have been devastated by elk, deer and cattle. Other areas, such as Fish Lake, Utah, have fenced off parts of the Pando Aspen grove to protect young aspen shoots. Re-introduction of wolves makes the fence building unnecessary. All riparian areas would be similarly protected. I realize that the wolf issue is highly charged and it may be difficult to enforce.

Response:

Reintroduction of species is outside of the scope of the plan. However, the topic of reintroductions is addressed by two management approaches in the section on Wildlife, Fish, and Plants which remind forest managers to: Coordinate with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, and the statewide Native Fish Conservation Team regarding maintenance of habitat for listed and native species; reintroductions, introductions, or transplants of species; control or eradication of non-native species; and the management of sport and native fishes, including the identification of refugia for native fish and the establishment or removal of fish barriers. Coordination includes referencing current agency recommendations for improving wildlife habitat such as guidelines for wildlife friendly-fencing. Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity. Updated information on wolf recovery is available on the following website: <http://www.fws.gov/southwest/es/mexicanwolf/>

Commenter: Sullivan, Eugenia

Comment:

the Forest Service should create additional protected wilderness areas for aspen groves and riparian areas in particular.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such

resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Sullivan, Paul

Comment:

I would like to see Alternative C accepted for the new plan revision. It seems to have the most protections in it for our forest.

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Sullivan, Paul

Comment:

consider adding even more wilderness areas or at the very least expanding the temporary Forest Order to include more areas that are still seeing illegal trail construction.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not

compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of “medium +” or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey’s. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey’s PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey’s, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Swersey, Mary

Comment:

This area is immensely important to the physical and emotional welfare of local people and visitors who return year after year to enjoy the benefits of its beauty and serenity. Not to protect this area would adversely affect not just the people who enjoy it, but the economic welfare of the local businesses and people.

Response:

The Forest Plan is designed to contribute to ecological, social, and economic sustainability focused on meeting the needs of the present generation without compromising the ability of future generations to meet their needs. The plan gives direction to manage the forest consistent with the Multiple Use-Sustained Yield Act of 1960 and provides goods and services including outdoor recreation, timber, range, watershed, wildlife, and fish.

Commenter: Tamara, Anon

Comment:

I live part-time in Lake Montezuma right now and will live there full time in about 2 years. I am writing to let you know the types of trail systems I hope to see go in our area. I am an avid intermediate motorized dirt-bike rider and know several others in the area. It would be so very nice to have see some single track loop systems that extend several miles . It seems that there are already several 4x4 roads for bigger vehicles. I am also an intermediate hiker and hope to also see some nice trails implemented for all levels of hikers.

Response:

The Forest Plan proposes to manage trails to provide a variety of opportunities, including motorized use. See FW-Rec-Trails-DC-1 and 2. Decisions on where to allow motorized use are guided by the Forest Plan, but are made at the project level based on site-specific information and analysis. These decisions will be guided by several components in the Forest Plan. Having a variety of trail types and levels of challenge for a diversity of users within a variety of settings is a Trails desired condition. See FW-Rec-Trails-DC-2. For motorized recreation opportunities in particular, it is a desired condition for trails to provide various challenge levels and to be available for off-highway-vehicle touring. See FW-Rec-Trails-DC-7. However, another Trails desired condition indicates a preference for multi-use trails over single-use trails. See FW-Rec-Trails-DC-5.

Commenter: Taylor, Dan

Comment:

At page 65, Mixed Conifer with Aspen, FW-Veg-MC-MCA-DC, fine scale (10 acres or less) * Snags should still be mentioned/included in the Desired Conditions at this scale.

Response:

Snags have not been included in the fine scale desired conditions for the Mixed Conifer With Aspen ERU. Snags are part of the desired conditions for the landscape and mid-scales in the Mixed Conifer with Aspen ERU. See FW-TerrERU-MC-MCA-DC-2, 3, 4, and 6. The desired conditions promote conditions that reflect the disturbance regime of this ERU including variably sized patches of trees which are frequently in the hundreds of acres, and old growth structure over large areas as stands or patches where old growth components are concentrated, including snags. Older declining trees are a component of this ERU provide for snags and are well-distributed throughout the landscape. See FW-TerrERU-MC-MCA-DC-1, 2, 3. Snag densities differ by seral stages which reflect disturbance regimes. See FW-TerrERU-MC-MCA-DC-6. Given the disturbance regime associated with this ERU (mixed or high fire severity with a fire return interval of 35 to 200 or more years), and single tree to isolated group torching in moister conditions, snags would be expected in a variety of seral stages, across the landscape, and predominantly in larger patch sizes and thus are not described at the fine scale as part of desired conditions. See FW-TerrERU-MC-MCA-DC-7.

Commenter: Taylor, Dan

Comment:

At page 30, Management Approaches for Caves, Cliffs, and Talus Slopes * White-nose Syndrome (WNS) should be mentioned specifically, i.e. "Educate the public on disease prevention "best practices" for caves," especially related to preventing the introduction of White- nose Syndrome"

Response:

Several adjustments have been made to the Forest Plan in response to comments regarding white-nose syndrome. A guideline that addresses the spread of diseases such as white-nose syndrome has been added to the Geological Features section. See FW-BioPhys-Geo-G-6. See also FW-WFP-G-3 which would manage activities and projects to prevent or reduce the likelihood of introduction or spread of disease. In addition, a management approach in the Geological Features section has been adjusted. It now contains a specific reference to white-nose syndrome and reminds forest managers to:Foster collaboration with the U.S. Fish and Wildlife Service, Bat Conservation International, Arizona Game and Fish Department, the National Speleological Society, and other stakeholders to address conservation, interpretation, and education management for cave dependent species and associated resources. For example, this collaboration could assist with understanding the cause and transmission of WNS (which is not currently well understood) or with the development and implementation of cave and karst management plans.White-nose syndrome would also be covered under desired conditions in the section on Invasive Species. These desired conditions promote invasive species being detected at an early stage and being absent or existing at levels that do not disrupt ecosystems or do not affect the sustainability of native species. See FW-Invas-DC-1 and 2. An Invasive Species guideline assures that measures would be incorporated into activities, planning, and implementation to address invasive species and the integrity of native species populations. See FW-Invas-G-1.

Commenter: Taylor, Dan

Comment:

At page 32, Vegetation, All Vegetation Types, Desired Conditions for All Vegetation Types, FW-Veg- All-DC, Landscape Scale (10,000 acres or greater) * 2, Snags are not specifically identified in the linked definition of structure, nor coarse woody debris, so they should be mentioned specifically, or included in the definition of structure.

Response:

The definition of "structure" in the Glossary for the Forest Plan has been adjusted to include "snags." Snags are discussed in greater detail in the desired conditions for specific ERUs. For example, see FW-TerrERU-PJ-DC-2, 5, and 7.

Commenter: Taylor, Dan

Comment:

At page 33, Vegetation, All Vegetation Types, Desired Conditions for All Vegetation Types, FW-Veg- All-DC * 7, "Vegetation provides ecologically sustainable amounts of products..."

Response:

The Forest Plan has been adjusted in response to this comment. The term "ecologically" has been added to modify "sustainable amounts of products." See FW-TerrERU-All-DC-5.

Commenter: Taylor, Dan

Comment:

At page 34, Guidelines for all vegetation types. FW-Veg-All-G * 2, How is even-aged management used as a strategy for old tree retention (and as opposed to other silvicultural treatments)?

Response:

This guideline has been adjusted in response to this comment. The reference to old growth retention has been removed from this component. Furthermore, as written, this component was technically a management approach. Accordingly, this guideline was moved to the management approaches section for All Terrestrial ERUs. It now states: Consider a variety of silvicultural practices, including even-aged, uneven-aged, and the use of fire as strategies to achieve the desired conditions over the long-term. Even-aged cutting methods may be necessary in certain circumstances, such as bringing mistletoe infection levels to within a sustainable range.

Commenter: Taylor, Dan

Comment:

At page 38, Guidelines for Riparian Types, All Riparian Forest Types, FW-Veg-Rip-All-G * 1, This should read, "In riparian areas, recreation activities, permitted uses, and management activities should occur at levels or scales that have no or minimal impact to soil function, riparian vegetation, and water quality." Saying "do not significantly impact" means it could be allowed to cause "considerable" impact, as there is not a quantitative measure or standard for what is "significant". This is an extremely underrepresented habitat type that is disproportionately valuable to biological diversity, so the emphasis or burden of proof should be on the side of conservation.

Response:

The language in the Riparian Forest Type guideline has been adjusted in response to your suggestion. The revised guideline has been moved to the Riparian Forest Types subsection of the Riparian Areas section of the plan. See FW-Rip-RipType-G-3.

Commenter: Taylor, Dan

Comment:

At page 45, Guidelines for Grassland Types, All Grassland Types, FW-Veg-Grass-All-G * 1. Disturbance from management activities in key pronghorn fawning areas during fawning season should be avoided minimized to maximize reproductive success (since you are using the qualifier, "should", rather than "will be", you should use the more restrictive verb)

Response:

This guideline has been merged with other plan components related to timing restrictions and moved to the Wildlife, Fish, and Plants section to create a more strategic guideline that generally addresses these types of concerns. See FW-WFP-G-8. Although the verb has not been changed from "should be" to "will be," to be consistent with the Forest Plan projects and activities must apply timing restrictions unless they can meet the intent of the guideline (to minimize or avoid impacts to survival or successful reproduction) another way. See discussion on guidelines in the Plan Decisions section in Chapter 1 of the Forest Plan.

Commenter: Taylor, Dan

Comment:

At page 45, Guidelines for Grassland Types, Great Basin and Montane/Subalpine Grasslands FW-Veg-Grass-GB&MSG-G * 2. This is unclear; it seems that by their very function, stock tanks and wildlife water developments will increase concentrations of grazing animals, in open or closed areas. Perhaps saying they should be placed "in a location or manner" might make more sense, but this guideline could use more clarification.

Response:

The Forest Plan has been adjusted in response to this comment. The guideline was poorly worded which allowed for unintended interpretations. The guideline has been reworded to more broadly address the concern of grassland composition, structure, and productivity and soil function and some suggest some actions that could be employed to address the concern. See FW-TerrERU-Grass-G-2. We also modified a desired condition in Livestock Grazing to account for conditions immediately adjacent to areas where livestock are likely to concentrate. See FW-Graz-DC-2.

Commenter: Taylor, Dan

Comment:

At page 79, Standards for Livestock Grazing, FW-GRAZ-S * 1. Suggest re-wording to; "To prevent accidental wildlife entrapment and mortality, all troughs and open- topped storage tanks shall incorporate escape devices that are firmly attached to and meet the sides of the water development, are made of long-lasting and grip-able materials, and extend down to the bottom or lowest expected water level.

Response:

The Forest Plan has been adjusted in response to this comment. The requested detail has been added as a management approach in the Livestock Grazing section, which reminds forest managers:When selecting and installing escape devices, consider devices made of long-lasting and grip-able materials that can be firmly attached to and meet the sides of the water development, and extend down to the bottom or lowest expected water level.

Commenter: Taylor, Dan

Comment:

At page 57, Guidelines for Ponderosa Pine, FW-Veg-PP-G * 5. When referencing snags, it should be qualified to the effect of "the largest and tallest snags representative for that stand", as research in multiple forest types has demonstrated that snag-roosting bats (at least 10 of the Coconino's 21 species) often prefer the largest and tallest snags in a stand.

Response:

The Forest Plan has been adjusted in response to this comment. The guideline has been edited to place an emphasis on the largest and tallest snags representative of the stand. See FW-TerrERU-PP-G-5.

Commenter: Taylor, Dan

Comment:

At page 27, Guidelines for Springs, FW-Aq-Spr-G * Additional detail that can be added to the existing guideline could include, , "...including adequate spacing of wire or horizontal structures to allow access for pronghorn, deer, and other mammals, and adequate distance from pooled water to allow access by bats swallows, and nighthawks, which drink while in flight"

Response:

The language in the Springs guideline has been edited to incorporate your suggestions and moved to the Wildlife, Fish, and Plants section (see FW-WFP-G-5) where it addresses all structural improvements that could impact wildlife, not just structural improvements associated with springs.

Commenter: Taylor, Dan

Comment:

At page 66, Guidelines for Mixed Conifer Types, FW Veg-MC-MCFF-G * 1. and 2. Be more specific, "old-growth" forest structures" and "old-growth structural characteristics" should be defined, i.e. snags, large broken-topped trees, etc.

Response:

The Forest Plan has been adjusted in response to this comment. Additional detail regarding old growth forest structures was not added into these guidelines. The desired elements associated with old growth structure are discussed in the desired conditions for the Mixed Conifer Frequent Fire ERU. See FW-MC-MCFF-DC-2 and 3.

Commenter: Taylor, Dan

Comment:

At page 71, General Description and Background for Wildlife, Fish, and Plants * Insert "primarily" before "dependent", i.e., species are primarily dependent...as some species with adequate habitat (grey wolf, northern leopard frog, etc.,) may have healthy habitat but are persecuted or subjected to disease, or other non-habitat factors.

Response:

General Description and Background for the Wildlife, Fish, and Plants section has been edited as suggested.

Commenter: Taylor, Dan

Comment:

The correct common name is "bison" (Bison bison), not buffalo

Response:

The Forest Plan has been adjusted in response to this comment. A parenthetical mention to "bison" has been added to the two references to "buffalo" in the Forest Plan.

Commenter: Taylor, Dan

Comment:

At page 73, Desired Conditions for Wildlife, Fish, and Plants, FW-WFP-DC * The word "riparian" or phrase "riparian habitat" is not mentioned anywhere in the Desired Conditions. In 6., "vegetation and stream connectivity" is the closest thing. Given the importance of this habitat to wildlife, it should be specifically mentioned.

Response:

Several of the desired conditions in the Wildlife, Fish, and Plants section have been edited to address your suggestion that there should be more explicit references to riparian habitat. FW-WFP-DC-3 specifically mentions riparian areas and the necessary physical and biological habitat components that they provide. A desired condition related to riparian habitat in the Stream subsection of the former Water Quality, Water Quantity, and Aquatic Systems section has been moved to the Wildlife, Fish, and Plants section. See FW-WFP-DC-4. Finally, information related to habitat associated with stream ecosystems that was located in another desired condition in the Stream subsection of the former Water Quality, Water Quantity, and Aquatic Systems section has been moved to the Wildlife, Fish, and Plants section and combined with one of the previous desired conditions in that section. See FW-WFP-DC-6.

Commenter: Taylor, Dan

Comment:

At page 74, Objectives for Wildlife, Fish, and Plants, FW-WFP-O * 1, 2. Provide example of an "action" (...."implement at least 20 actions...")

Response:

The language in the Wildlife, Fish, and Plants objective (FW-WFP-O-1) has been adjusted in response to your suggestion to provide an example of an "action." The following sentence has been added to the objective: "An example of an activity could be thinning a Mexican spotted owl protected activity center to reduce the risk of uncharacteristic fire and to improve habitat conditions for prey species."

Commenter: Taylor, Dan

Comment:

At page 75, Management Approaches for Wildlife, Fish, and Plants * Specific mention should be made regarding coordinating/collaboration with AZGFD on the implementation of the State Wildlife Action Plan. These plans apply to the management and conservation of wildlife on all jurisdictions, private and public.

Response:

A management approach in the Wildlife, Fish, and Plants section has been adjusted in response to this comment. It states: Coordinate with the Arizona Game and Fish Department regarding the State Wildlife Action Plan as well as hunting recommendations for various wildlife populations that would lead to maintenance and improvement of habitat elements such as vegetation, aspen, riparian, and soil condition and productivity.

Commenter: Taylor, Dan

Comment:

change "Closure areas around caves or gating of caves should only be considered as a management practice when there are no other options to protect cave and wildlife resources and public safety" to "...when there are no other options" to " Closure areas around caves or gating of caves should only be considered as a management practice when they are the best there are no other options to protect cave and wildlife resources and public safety"

Response:

The guideline addressing closure areas around caves or gating of caves has been merged into another guideline in Geological Features section of the Forest Plan that addresses the concern in a strategic manner. Rather than focusing on when a closure area or gating may be appropriate, the guideline directs projects to be designed and uses to be managed to maintain the integrity and function of caves, karst, cliffs, and talus slopes. See FW-BioPhys-G-1. This allows concerns about the need to control access to an area (as well as other concerns) to be balanced against the potential impacts of those controls based on site specific information.

Commenter: Taylor, Dan

Comment:

At page 53, Desired Conditions for Ponderosa Pine, FW-Veg PP-DC * Table 9. Please explain why mid-age forest and mature/old forest are lumped together in column one ('state') in the table, their structural characteristics and value as wildlife habitat are very different, with the mature forest having more features valuable to bats and other cavity and snag-roosting wildlife, i.e., more and larger snags, larger green trees, more broken tops, broken limbs, and cavities.

Response:

The seral stages listed in the table that was included Ponderosa Pine Ecological Response Unit section are intended to represent the desired proportion of seral stages for ponderosa pine at the forest scale. The proportions were not adjusted in response to these comments. This table (along with similar tables included in the plan direction for other Ecological Response Units) has been moved to Appendix F of the Plan and is now identified as table 17. The Introduction for Appendix F explains that seral stage proportions for modeled states should be assessed at the scale of the entire Ecological Response Unit within a Forest boundary or greater. Collectively the table plus the more detailed text in the plan comprise the desired conditions. Seral stage proportions are rarely, if ever, applied at the project level. Because these seral stages only apply at these very broad scales, they should not conflict with variations in seral stages that are associated with natural disturbance regimes observed at the project level. The seral stage table for ponderosa pine in Appendix F has been modified to clarify that recently burned (in the Early Development state) refers to larger than desired openings being created primarily by stand-replacing wildfire when it occurs in closed canopy states (State N). This would result in a longer time period required to move back to a forested state compared to characteristic wildfires. The early development state also include characteristic states which existed in reference conditions (State A). The desired condition is to have characteristic fire sustain predominantly open ponderosa pine. Predominantly open conditions would support herbaceous plants, properly functioning soil, natural disturbance regimes, and all-aged vegetation structure. See FW-TerrERU-PP-DC-2, 3, 4, 8, 10, and 13. In table 17, mid-aged forest and mature/old forest are combined to reflect the intermix of age classes present at the landscape level. This would reflect landscape-scale desired conditions of a mosaic of trees of various age classes; of trees in structural stages that range from young to old; an arrangement of individual trees, small clumps and groups interspersed with variably sized openings; groups of similarly aged trees and single trees interspersed with open interspaces; and various proportions of patches with different developmental stages. See FW-TerrERU-PP-1, 4, 6. It is important to note that the desired openings for grass, forb, and shrub understory vegetation is built into the multistoried (uneven-aged) states and is not identified separately.

Commenter: Taylor, Dan

Comment:

It should be noted in the second paragraph on page 24 that the greatest threat and direct cause of wetland loss is the channelization and draining of wetlands via the disturbance that you listed, i.e. grazing, road-building, and stock tank construction, as well as the lowering of water tables by stream down-cutting and incision.

Response:

The General Description and Background for the Wetlands section has been adjusted to incorporate your comment regarding channelization and lowering of water tables.

Commenter: Taylor, Dan

Comment:

In general, the Desired Conditions were very good for the most important components of bat habitat, caves, abandoned mines, riparian habitat including wetlands, and forests, particularly snags, however, the Plan would benefit greatly from additional Objectives, Guidelines, and Standards, to help meet these Desired Conditions. For example, the Desired Conditions for most forest types included language describing the maintenance of snags and other mature or old-growth forest structure well-distributed at the mid and landscape level, however, there was little language in the form of Standards or Guidelines that called for the retention or recruitment of snags during forest management activities such as timber harvest, thinning, or prescribed burning. The same issue applied to the treatment of riparian habitats, but to a lesser extent. This is the one aspect of the Plan that we feel would provide the greatest improvement.

Response:

Desired conditions in the Forest Plan do not need an accompanying standard or guideline to be implemented. While it is true that projects and activities must meet the guidance in standards and guideline, projects and activities must also be consistent with the desired conditions in the Forest Plan. To demonstrate consistency with the desired conditions, a project or activity must be designed to Maintain or make progress toward one or more of the desired conditions of a plan without adversely affecting progress toward, or maintenance of, other desired conditions; or Be neutral with regard to progress toward plan desired conditions; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward or maintenance of one or more desired conditions in the short term; or Maintain or make progress toward one or more of the desired conditions over the long term, even if the project or activity would adversely affect progress toward other desired conditions in a negligible way over the long term. Objectives are not targets, but projections, and they may not be fully achieved based on a variety of factors. The objectives in the Forest Plan are not designed to entirely resolve departures from desired conditions or to resolve them as quickly as possible. Rather, objectives are measurable results designed to maintain or move the Forest towards desired conditions. Objectives are based on anticipated budget and staffing and can be exceeded should the opportunity arise. See the discussion on objectives in the Plan Content section in Chapter 1 of the Forest Plan for additional information on objectives. See the Plan Content and Guiding Future Projects, Program Plans, and Assessments sections in Chapter 1 of the Forest Plan for additional information on the need to be consistent with desired conditions.

Commenter: Taylor, Dan

Comment:

At page 19, Guidelines for Watersheds, Management Approaches for Watersheds * Insert "USGS" after "Rocky Mountain Research Station"; the USGS Western Science Center is currently collaborating with the Coronado National Forest to conduct relatively inexpensive and effective remote sensing techniques for evaluating hydrological conditions at the 4th and 5th HUC code scale.

Response:

The management approach has been adjusted to incorporate a reference to the United States Geological Survey as suggested. See FW-Water-Management Approaches, which states: Coordinate with the Rocky Mountain Research Station, United States Geological Survey and other research organizations on long term and landscape studies of watershed function.

Commenter: Taylor, Dan

Comment:

At page 22, Stream Ecosystems, General Description and Background * Second paragraph: "They provide wildlife habitat, increased biodiversity, and wildlife corridors, enabling aquatic, riparian, and terrestrial organisms to move along river systems and thus avoiding isolated communities.

Response:

This information has been incorporated into the General Description and Background for All Riparian Areas. Stream Ecosystems are a subsection of All Riparian Areas.

Commenter: Taylor, Dan

Comment:

The general description for stream ecosystems (pages 21-22) does a good job of pointing out the ecological importance of this ecosystem, and the Desired Conditions are very thorough and appropriate, however, given their importance as cited, it seems as if there should be at least some basic Objectives, Guidelines, Standards, and or Management Approaches, as there are only Desired Conditions. Perhaps this is intentional assuming these are being left to the subsequent, related ecosystems, i.e. springs and riparian, but if this is the case, this should be stated, or they can be added to this section, and re-stated in subsequent sections.

Response:

In response to your comment, the Plan was reviewed and most of the direction on stream ecosystems was gathered from other sections of the plan and grouped together in the Stream Ecosystems subsection of the Riparian Areas section. For example, guideline FW-Aq-Wat-G-2 was edited and moved to FW-Rip-Strm-G-1 and the aquatic management zone direction found in FW-Veg-Rip-All-G-2 was edited and moved to FW-Rip-Strm-G-2.

Commenter: Taylor, Dan

Comment:

At page 28, Desired Conditions for Caves, Cliffs, and Talus Slopes, FW-BioPhys-Geo-DC * 3. "Caves provide habitat for species that require specialized conditions for raising young, resting, and overwintering such as bats."

Response:

The desired condition in the Geological Features section has been adjusted in response to this comment. Specifically, "raising young" was added to the specialized conditions listed in the desired condition. "Roosting" was not replaced with "resting" as suggested because it is generally included within the definition of roosting. See FW-BioPhys-Geo-DC-3.

Commenter: Taylor, Dan

Comment:

The sentence "Wetlands on the forest are generally disconnected from groundwater and perched above regional groundwater tables and, thus, are completely reliant on precipitation for water input" would be more accurate if "generally" was changed to "often", as cienegas are widely considered a type of wetland (hydric soils, periodically inundated, hydrophyllic plants), and these are usually directly connected to groundwater (Mitsch and Gosselink 2007). It may be better to use the term "ephemeral wetlands", which would describe sites like Allan Lake, and they type of wetlands found on Anderson Mesa and Roger's and Duck Lakes.

Response:

The General Description and Background for the Wetlands section has been adjusted to acknowledge that these areas are inundated by surface or ground water. Cienegas are identified as a type of spring and are addressed in the Springs section.

Commenter: Taylor, Dan

Comment:

4, this should be changed to "Where human alteration of caves can not be avoided, they should be mitigated to mimic pre-disturbance conditions and function or where this level of restoration is not feasible to prevent further degradation of the cave resource and functions.

Response:

The Forest Plan has been adjusted in response to this comment. The Geological Features guideline has been adjusted to emphasize avoiding alteration of these resources. The guideline also requires mitigations to mimic pre-disturbance conditions if alteration cannot be avoided. See FW-BioPhys-Geo-G-1.

Commenter: Taylor, Dan

Comment:

On page 24, the first paragraph after the table, the sentence "Wetlands provide water storage, wildlife habitat, recreation, fisheries, and livestock watering" should be modified to read "....and water for livestock grazing". This would imply that water from wetlands could be piped to a trough for livestock use. To suggest that wetlands would be purposely used as a watering site for livestock would be contrary to the Desired Conditions for this plan, and regional and national Forest direction and policy.

Response:

The reference to "livestock watering" in the General Description and Background for the Wetlands section has been removed.

Commenter: Taylor, Dan

Comment:

The last paragraph on page 24, beginning with "Cienegas are linear stream associated with spring recharge...." Is not the generally accepted definition of a cienega (Mitsch and Gosselink 2007), also, see the following definition from the Kaibab National Forest Plan; "The wetland/cienega vegetation communities are associated with perennial springs or headwater streams where groundwater intersects the surface and creates pools of standing water, sometimes with channels flowing between pools."

Response:

In response to the comment, cienegas have been moved from the Wetlands section to the Springs section. The Glossary for the Forest Plan defines cienegas as spring fed wet meadows. The General Description and Background for Springs describes springs as " Springs are surface-linked ecosystems where ground water reaches and usually flows from the earth's surface in complex, and sometimes lengthy, flow paths through subsurface structural, geochemical, and geomorphic environments" (from Stevens and Meretsky 2008) and includes cienegas as a helocrene spring type (one of 10 types on the forest), which emerges from low gradient wetlands; often with indistinct or multiple sources. Management direction for springs (which includes cienegas as one of the types) can be found in the FW-Rip-Spring section.

Commenter: Taylor, Dan

Comment:

At page 29, Guidelines for Caves, Cliffs, and Talus Slopes, FW-BioPhys-Geo-G2. * Blasting and/or controlled source seismic surveys requiring explosives or other disruptive techniques should where possible avoid or minimize damage to cave features.

Response:

The Forest Plan has been adjusted in response to this comment. The Geological Features guideline has been adjusted to emphasize avoiding alteration of these resources. The guideline also requires mitigations to mimic pre-disturbance conditions if alteration cannot be avoided. See FW-BioPhys-Geo-G-1.

Commenter: Taylor, Dan

Comment:

At page 26, General Description and Background for Springs * Second paragraph, the first sentence should read, "Many springs are used as water sources for domestic use, livestock, and or wildlife." as springs are often used simultaneously for all three. In the next sentence, add, "...such as snails, plants, and invertebrates" after "endemics".

Response:

The General Description and Background for Springs has been edited to incorporate your suggestions.

Commenter: Taylor, Dan

Comment:

At page 26, Desired Conditions for Springs * 5, Second sentence, after ..."spring type", add "..and site factors such as slope, aspect, and solarization, and can include...."

Response:

The Springs desired condition has been edited to incorporate your suggestions. See FW-Rip-Spr-DC-2.

Commenter: Taylor, Dan

Comment:

At page 27, Objectives for Springs" FW-Aq-Spr-Obj * For the superscript footnote 10, re-word to read, "Where there is a structure in place to utilize water from a spring as a water source, the spring and any immediate associated riparian habitat should be protected, by fencing if necessary, and water should be piped out of the riparian area to avoid trampling of the riparian area around the spring".

Response:

The language in the footnote in the Springs objective (see FW-Rip-Spr-O-1) has been edited to incorporate your suggestions and incorporated into FW-Rip-Spr-G-4.

Commenter: Taylor, Dan

Comment:

* "To increase chances of survival for young wildlife, active roosts, nests, and dens should not be disturbed." "should not be disturbed" should be strengthened by replacing with or adding language such as "Seasonal restrictions should be considered to reduce disturbance and increase chances of survival for young wildlife in known active roosts, nests, and dens in caves, cliff faces, and talus slopes".

Response:

The Forest Plan has been adjusted in response to this comment. This plan component has been moved to the Wildlife, Fish, and Plants section and combined with other plan direction related to disturbance to wildlife. Timing restrictions in the Forest Plan specifically apply to federally listed species, golden eagles, bald eagles, Southwestern Region sensitive species, and pronghorn to promote recovery, preclude listing, and to address pronghorn for which there has been population concerns over the years. See FW-WFP-S-2 and FW-WFP-G-8. In addition, the Geological Features section has a guideline that requires that caves and abandoned mines be managed to protect bats from disturbance. See FW-BioPhys-Geo-6. Caves can be used by bats during sensitive time periods such as raising their young or hibernating when they are particularly sensitive to disturbance; or caves can be used by bats roosting in colonies such that a relatively large number of bats could be disturbed by one disturbance. The Forest Plan is intended to give managers flexibility in how species and their habitat is protected, maintained, and enhanced. The Forest Plan does not preclude managers from using timing restrictions as a means to achieve or move towards desired conditions in the Forest Plan, such as to keep common species common and to maintain or improve habitat for species populations and their habitat over the long term. See FW-WFP-DC-2 and 8. Although not specifically prescribed, timing restrictions could also be used a tool to maintain or improve habitat for native species; protect raptors from disturbance; or to protect or provide for narrowly endemic species, or those with restricted distributions. See FW-WFP-G-3, 10, and 11.

Commenter: Taylor, Dan

Comment:

At page 28, Biophysical Features, Caves, Cliffs, and Talus Slopes, General Description and Background for Caves, Cliffs, and Talus Slopes * Second paragraph, suggested wording, "A cave's suitability for bats is determined primarily by cave microclimate; especially temperature and humidity, as well as protection from disturbance."

Response:

The General Description and Background for the Geological Features section has been adjusted. The suggested sentence has been added to this section.

Commenter: Taylor, Dan

Comment:

At page 23, Wetland/Cienega and Reservoirs/Lakes * Reservoirs should be considered separately from Wetlands, Cienegas and Lakes. While the pooled water created by reservoirs can support wetland vegetation, wetlands, cienegas, and the two natural lakes on the Coconino National Forest and their associated wetlands are very different ecological systems than reservoirs, and at least originally were created and maintained by historic hydrological, geologic, and geomorphological processes, while reservoirs are by definition human-made features with a very different ecological character and processes. Perhaps the general categories, Natural versus Constructed waters, as used in the Kaibab National Forest Plan would be a better construct for organizing these features.

Response:

In response to your comment, reservoirs have been moved to a new section of the plan that provides guidance for Constructed Waters. See plan components in the FW-ConstWat section for direction on reservoirs and other constructed waters.

Commenter: Taylor, Dan

Comment:

At page 29, Desired Conditions for Caves, Cliffs, and Talus Slopes, FW-BioPhys-Geo-DC * 9. Add small mammals, "Talus slopes are natural, generally undisturbed features that provide habitat for small mammals, lizards, snakes, land snails, lichens, and rare plants..."

Response:

Additional information regarding talus slopes has been added to the General Description and Background for the Geological Features section, including a reference to small mammals. The desired condition has been adjusted to be more inclusive and now refers to lichens, plants, invertebrates, and vertebrates. See FW-BioPhys-DC-7.

Commenter: Taylor, Dan

Comment:

At page 25, Guidelines for Wetland/Cienega and Reservoirs/Lakes, FW-Aq-WtInds-G * 1, insert "and managed herbivory (i.e. livestock and or elk)" after "fire" so the sentence reads, "Where necessary to restore waterfowl nesting habitat, fire and managed herbivory may be used to remove vegetation and maintain wetland conditions that provide open water, cover, and other beneficial habitat features for wild. Managed grazing is a good tool for maintaining open-water habitat for waterfowl, drinking access for bats, and other open-water wildlife needs.

Response:

In response to this comment, this guideline was merged with several other plan components to create a more strategic guideline that addresses all riparian areas and any activities that could impact their natural functions or the habitat they provide. See FW-Rip-All-G-2.

Commenter: Thurman, Thomas

Comment:

Yavapai County encourages the Coconino National Forest to continue to work with the unincorporated communities to consider their needs for recreational opportunities in their respective areas. Continued partnership in regional planning efforts will help develop guidelines to mitigate undesired impact to public lands and maintain recreation and transportation opportunities for the public.

Response:

The Forest Plan has been adjusted in response to this comment. A management approach has been developed for the All Recreation section that reminds forest managers to: Collaborate with state and federal agencies including National Park Service, Arizona State Parks, AZGFD, concessionaires, chambers of commerce, nonprofit organizations, Northern Arizona University, state, city and county governments, recreation stakeholders, local communities and citizens, partners and volunteers regarding provision of recreation opportunities in Northern Arizona and communicating these to the public. Work in partnership to find creative solutions to operate and maintain recreation sites, trails and trailheads, and provide interpretive and environmental education. Determine gaps and overlaps in opportunities and resolve conflicts between users, and providers. Work together to determine activities that increase our capacity to serve a diverse population while promoting social, economic and natural resource sustainability.

Commenter: Thurman, Thomas

Comment:

Although the county appreciates the focus that the plan may place on the Red Rock area, it is important to note that there are other areas/communities within the plan's scope that offer excellent resources for recreational opportunities that are both supported by the comprehensive plan and individual community vision statements. It is noted that the Beaver Creek community has adopted a Vision statement that has been endorsed by Yavapai County. Staff finds it prudent to consider this statement when making recommendations for this area specifically.

Response:

The Forest Plan has been adjusted in response to this comment. Additional information has been added to the Verde Valley Management Area section that emphasize the resources and opportunities in this area, which includes the Beaver Creek community. In addition, as a reminder to forest managers, the Beaver Creek Vision 2020 document has been referenced in the Verde Valley Management Area section in Appendix, Other Sources of Information.

Commenter: Tolleson, Doug

Comment:

If these results are measureable and anticipated; are you setting yourself up for failure to make statements such as "Mechanically restore/ enhance 3,500 acres of Semi desert Grasslands every 10-yearperiod during the life of the plan." I commend you for; setting real goals and working to attain them, but in the litigious arena of public land management should you create vulnerability for the Coconino National Forest? I am sure you looked at contingencies, but what if we continue in drought or it gets worse? How will you define "restore/enhance" and defend your results, do you have the people to do the archaeology required, the NEPA, will you do this work in-house or contract it, are there enough contractors available, etc...and especially... are there any consequences for the Coconino National Forest if you do not meet these objectives? I am not sure the statements "Objectives are written based on recent trends, current and anticipated staffing levels, and anticipated budgets. Changes in environmental conditions, budgets, and other factor s during the plan period may result in a need to re-evaluate plan objectives." cover you enough.

Response:

The Forest Plan has been adjusted in response to this comment. The Plan Decisions section in Chapter 1 of the Forest Plan contains descriptions of the various types of plan components used in the Forest Plan, including objectives. The description on what an Objective is and is not has been adjusted to clarify that these statements are not targets, but projections, and that they may not be fully achieved based on a variety of factors. A definition for the term "restoration" has been added to the Glossary. It states that restoration is: The process of assisting in the recovery of an ecosystem that has been degraded, damaged, or destroyed (Society for Ecological Restoration International, 2004). Ecological restoration focuses on establishing or re-establishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions. Accordingly, any project or activity that assists in the recovery of a degraded, damaged, or destroyed ecosystem can be considered restoration. Restoration can be active or passive. Treatments that move ecosystem components toward desired conditions are considered restoration as are removal of impacts. Allowing natural processes to move ecosystem components toward desired conditions can also assist in the recovery of an ecosystem.

Commenter: Tolleson, Doug

Comment:

Another positive observation is the arrangement of the Vegetation section by scale. This is not just an organizational advantage in the document but should also help guide common sense and ecologically relevant management decisions on the ground. Ecosystems and disturbances occur and have effects at fine to landscape scales; they also have a temporal scale component. Specific management alternatives should be evaluated accordingly. It can be frustrating to implement production or restoration project management for an entire landscape when we try to compare each plant, acre, or stream reach to a "desired" or "proper" condition that actually describes a larger mosaic. Thus, a given acre may not meet that criteria but may very well be a functional piece of the overall ecosystem puzzle that does. A given site may also be on a long slow transition toward a desired state. I think a similar overall approach to sections such as Watersheds would be useful.

Response:

Having plan direction by scale can be useful. Forest Plan direction has direction by scales when there is sufficient information to do so or when the topic lends itself to that arrangement. Watersheds are an example of a resource in which using scales is challenging. Even though watersheds are divided and sub-divided by hydrological unit code (HUCs) nationally, the direction in the Watershed and Water section applies to all scales regardless of size unless indicated otherwise. Different aspects of watersheds are listed individually (Stream Ecosystems, Riparian Areas, Riparian Forest Types) as are individual ERUs. Collectively the direction in each one of these sections would guide management in watersheds.

Commenter: Tolleson, Doug

Comment:

One comment on Guideline 4; the plant characteristics given are generally good but could vary depending on soils, species, time of year, etc... and the statement "Burned or mechanically treated areas should be given sufficient rest, especially during the growing season, to ensure plant recovery and vigor and to ensure that perennial plants would not be permanently damaged by grazing ." is a great idea, but how will you account for wildlife herbivory? You may also need some additional wording to allow for management flexibility if such an event occurred within a larger pasture. This ties in with the previous statements on scale. For instance, if a 500 acre fire was contained within a 5000 acre pasture, would application of this guideline cause that entire pasture to be unavailable until criteria were met on the burned portion? I can see this sort of occurrence being interpreted in such manner, and in some cases may certainly be correct. However, could criteria such as proportion of and location within the management area in question, management logistics (i.e. water, corrals), timing, previous actual use and or utilization, possible positive effects of the burn and or grazing, ecologically coupling fire and herbivory when appropriate (i.e. to create a fuel break around goshawk nesting areas), etc... be incorporated into this guideline? And this common sense approach applied to others?

Response:

No adjustment was made to this guideline in response to this comment. Wildlife herbivory can impact recovery of an area after it has been treated. Grazing is managed to meet or move towards desired conditions for forest resources. See FW-Graz-G-2. Decisions on how to manage grazing will need to take the impacts of wildlife herbivory into account. Likewise, treatment in a portion of a pasture may impact the management of the entire pasture. Determinations on the use of a pasture after a treatment has occurred will be made based on the site-specific circumstances of the treatment and the pasture.

Commenter: Tolleson, Doug

Comment:

Speaking of managing grazing in particular, not all permittees nor forest personnel will interpret the plan the same or attempt to be pro-active about addressing those differences. Language (with authority) providing guidance for and assuring collaboration at early stages of projects and in continuing dialogues with permittees in particular would go a long way toward achieving desired conditions. For instance "Collaborate with permittees, tribes, educational institutions, other agencies, and stakeholders in achieving and maintaining desired conditions, including invasive species management." is certainly a step in the right direction but in reality may do little to help accomplish that on the ground.

Response:

The Forest Plan has been adjusted in response to this comment. A management approach has been added to the Livestock Grazing section, which reminds forest managers to: Collaborate and communicate with permittees to facilitate ecologically and economically sustainable rangeland management, livestock grazing practices, and ecosystem goods and services.

Commenter: Tolleson, Doug

Comment:

And perhaps another standard? i.e. "Desired conditions and management alternatives will be co-developed by forest personnel and permittees (with third party participation if requested by either) prior to issuance of proposed actions" I understand the realities of scheduling and staffing but such language and more importantly, adherence to it by all parties would, based on my experience, lessen much of the difficulty encountered involving grazing permits.

Response:

No change was made in response to this comment. A standard requiring cooperative development of desired conditions and management alternatives would be redundant of existing regulations and policy, which require similar coordination through the normal scoping process for a project. See 40 CFR 1501.1, 36 CFR 220.4(e)(2), and FSH 1909.15, 11.

Commenter: Tolleson, Doug

Comment:

May I suggest you add another desired condition? i.e. "Collaboration and communication between forest personnel and permittees facilitates ecologically and economically sustainable production of ecosystem goods and services"

Response:

The Forest Plan has been adjusted in response to this comment. A management approach has been added to the Livestock Grazing section that reminds forest managers to: Collaborate and communicate with permittees to facilitate ecologically and economically sustainable rangeland management, livestock grazing practices, and ecosystem goods and services.

Commenter: Tolleson, Doug

Comment:

One similar specific comment on Standards: "Recreation goals are subordinate to antelope protection." This type statement, since standards are absolute, will also probably be unattainable in every instance and will likely pit those interest groups against each other, and you.

Response:

This standard has been removed from the Forest Plan in response to this comment. In its place, several plan components address the potential impacts of recreation on pronghorn in the same manner that other potential conflicts between activities and resources are handled in the Forest Plan. The forestwide direction for Wildlife, Fish, and Plants contains several desired conditions related to wildlife habitat, which includes pronghorn habitat. See FW-WFP-DC-1, 2, and 3, FW-WFP-G-13, and FW-Rec-Trails-G-1. A guideline for All Recreation in the Recreation section of the Forest Plan ties back to these Wildlife, Fish, and Plants desired conditions, requiring recreational activities to be managed to maintain or move toward the desired conditions for other uses and resources. See FW-Rec-All-G-1.

Commenter: Tolleson, Doug

Comment:

This section seems to be very "project-centric". It comes across as only applying to specific activities with a defined start and end, such as a grassland restoration, but I assume these statements would also apply to businesses such as ranching or ecotourism, or to broader amorphous group activities such as camping or ATV's. Unless I missed it, perhaps verbiage to clarify that would help.

Response:

The Forest Plan has been adjusted in response to this comment. The discussion on desired condition in the Plan Decision section in Chapter 1 of the Forest Plan has been adjusted to clarify that desired conditions apply to projects and activities that are taking place on the Forest.

Commenter: Tolleson, Doug

Comment:

They are aspirations and not commitments or final decisions approving projects." I encourage you to also promote this thinking at all levels of management within the forest.

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Tolleson, Doug

Comment:

Another great statement - "Desired conditions are timeless in that there is no specific date by which they are to be completed. They may only be achievable over a long time.frame (e.g., several hundred years). " As previously mentioned, this concept in addition to spatial scale will be very useful to not only capture in your plan but to implement on the ground. Trend monitoring data will be very important in this effort.

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)."The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Tolleson, Doug

Comment:

Figures such as 4 and 5 in the Ponderosa Pine section are very informative. Similar illustrations for species such as juniper would be useful as would spatial representations of other vegetation characteristics such as plant density and arrangement.

Response:

No change has been made to the Forest Plan in response to this comment. No similar illustrations for the age classes of pinyon juniper is available at this time.

Commenter: Tolleson, Doug

Comment:

Comments concerning Objectives and Standards 1) Just a minor editing suggestion, but I think it would be more accurate to state something to the effect that " ... measureable, anticipated results that help achieve desired conditions." rather than "respond to".

Response:

The Forest Plan has been adjusted in response to this comment. The discussion on objectives in the Plan Decisions section in Chapter 1 of the Forest Plan has been modified as suggested.

Commenter: Tolleson, Doug

Comment:

Comments about Desired Conditions 1) Great statement - "They attempt to paint a picture of what we (the public and the Forest Service) desire the forest to look like or the goods and services we desire it to provide." I encourage you to fully adopt this approach when working at smaller scales, i.e. districts or allotments. Currently, this is not always the case and I am sure when dealing with multiple "publics", is difficult to attain. It would also be advisable to consider using something similar to state and transition models in developing desired ecosystem conditions and to apply a triage approach when allocating time, effort, and priority to specific projects or sites.

Response:

Alternative B (modified) is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, several adjustments were made to this alternative. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Commenter: Unmacht, Jim

Comment:

Recreational Shooting: There are numerous State and Forest laws and regulations on the books regarding firearm possession and responsible use. We don't need additional rules to regulate any incidences of improper activities. If there are concerns, laws in place should be enforced against the minority of individuals that violate those laws. Limitations already exist with respect to shooting near buildings, residential areas and campgrounds. We do not support the elimination of recreational shooting from over 500,000 acres in proposed Wildlife Habitat Management Areas under the guise of not disturbing wildlife! Recent Federal guidelines also recommend developing or allowing recreational shooting on public lands when and where possible. Prohibition because of possible irresponsible use by a very small portion of the public should not make outlaws of the many responsible users!

Response:

Alternative C is described in chapter 2 and analyzed in chapter 3 of the environmental impact statement. In response to public comments, an editorial adjustment was made to several of the management areas in this alternative. The term "Wildlife Habitat" was removed from the names of the Hospital Ridge, Jack's Canyon, Knoll Lake, Limestone Pasture, Pine Grove, Second Chance, and Anderson Mesa management areas. In addition, the East Clear Creek Wildlife Habitat Management Area was renamed the Blue Ridge Management Area. However, no plan components included in the management areas being added by alternative C were changed. Alternative C shares many plan components with Alternative B. In response to public comments, several adjustments were made to Alternative B. These adjustments are discussed in the "Addressing Concerns Raised During the 90-Day Comment Period" section for Alternative B - Proposed Revised Plan in Chapter 2 of the final environmental impact statement. The adjustments included reorganization of plan components to make the Forest Plan easier to use, removal of redundant plan components and direction already covered by law, regulation, and policy, clarification of plan components, and inclusion of elements from alternatives C and D. To acknowledge these adjustments, this alternative is now referred to as "Alternative B (modified)." The rationale for the selection of the selected alternative and the final plan are described in the record of decision document.

Comment:

Wilderness Areas: Suffice it to say we have enough wilderness areas in the State of Arizona and on our national forests, including on the Coconino. We already have 90 designated wilderness areas in the state compiling over 4 million acres. We don't need more wilderness to effectively eliminate the average citizen from enjoying the beauty of our public lands! Alternative C would mean an almost 50% increase in additional wilderness areas and increase the area by approximately 250,000 acres. Many of the proposed wilderness areas include the presence of numerous existing roads, power lines as well as many water developments benefiting many species of wildlife. These are generally not pristine, never trammled upon by humans or undisturbed areas. They don't need additional restrictions to "keep the public off the land". While some additional wilderness designations may be appropriate for smaller areas or to add on to existing areas, increasing wilderness acres on the Coconino by almost 50% could have a significant adverse impact on those who enjoy motorized recreation, including wildlife viewing, hunting, geo-caching and other legal responsible uses. Problems with wildfire management, maintaining existing infrastructure for utilities, livestock and wildlife, Search and Rescue missions and other necessary activities could also suffer under both alternatives B and C.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in

the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Unmacht, Jim

Comment:

Any management proposals to further reduce legal access to these public lands through Wilderness or Wildlife Habitat Management Area designations would not be considered in the best interest of a substantial portion of our citizens and public land recreationists. One only has to look back to last fall and the heavy handed management actions with the infamous 72 hour "rule" publicized by the Coconino NF to get an idea on how this would be perceived.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: Unmacht, Jim

Comment:

There are already enough rules, regulations and restrictions in place, we don't need any more! These existing parameters can be implemented with effective Forest Service law enforcement in problem areas, seasonal road restrictions as used in some areas and Forest Service Courtesy Patrols during high use weekends to name a few examples.

Response:

The Forest Plan is strategic in nature and does not include project and activity decisions. Accordingly, the Forest Plan does not direct or designate routes or areas for motorized travel. Specific access and motorized use determinations would be done through future project-level decisionmaking, including the implementation of the Travel Management Rule (36 CFR §212). Some commenters have expressed concern with the Roads and Facilities objective that mentions decommissioning 200 to 800 miles of unauthorized and system roads on the Forest. This objective has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. Other commenters have expressed concern with the potential impact that Recreation Opportunity Spectrum (ROS) classifications and recommended wilderness areas could have on public motorized access. The ROS classifications for alternatives B (modified) and D have 2.6 miles of road that is currently open to public use that would be in the primitive or semi-primitive non-motorized class. Alternative C would have 14 miles of road open to the public that would be in these ROS classes, which were developed taking the additional recommended wilderness areas and management areas in this alternative into account. Alternative B (modified) contains no recommended wilderness areas with roads that are currently on the Motor Vehicle Use Map. Alternative C contains six recommended wilderness areas with a total of 10.6 miles of road that are currently on the Motor Vehicle Use Map. Accordingly, even if the ROS classifications and recommended wilderness areas are adopted by either alternative, the potential change to public motorized access would be very small.

Commenter: Valencia, Ruth

Comment:

Appendix B: Proposed and Probably Management Practices, Special Uses, page 240 states that a future proposed or probable management practice is to "issues and supervise forest product or vegetation management permits to lessen abrupt vegetation transition in power line rights-of-way, where it is necessary to clear the right-of-way boundary to meet national standards". All vegetation management work is conducted in accordance to industry standards, regulations and recommendations governing utility maintenance. Utilities are required to keep their permitted rights-of-way clear in order to comply with the various standards. Therefore, the utilities will not be able to feather the vegetation in their right-of-ways. If the Forest Service is suggesting that this transition area occur outside of the permitted right-of-way, then the utilities should not be responsible for the NEPA work or cost in order to reach the desired look. The Forest Service will have to take on the responsibility and costs of the additional work.

Response:

No change has been made in response to the comment regarding vegetation management outside of rights-of-way. As the comments suggest, vegetation management of this nature would require a decision based on site-specific information and would not necessarily be the responsibility of the holder of the right-of-way. The Forest Plan has been adjusted to address the comment regarding vegetation management within utility corridors. To provide more strategic and comprehensive coverage, one of the desired conditions in the Special Uses section was adjusted to acknowledge the legal mandates that apply to vegetation clearing for utility and energy transmission. See FW-SpecUse-DC-2.

Commenter: Valencia, Ruth

Comment:

General Description and Background for Water Quality, Water Quantity, and Aquatic Systems- Expand to include C.C. Cragin Reservoir.

Response:

The General Description and Background section for the Watersheds and Water section has been adjusted to address your concern. In recognition of the unique management concerns associated with the watersheds that serve the C.C. Crain Reservoir, Upper and Lower Lake Mary, and the Inner Basin, the Forest has identified these watersheds as separate management areas. See response to Concern #17 for additional information on these management areas. As adjusted, the General Description and Background section for the Watersheds and Water section recognizes that the watersheds within the C.C. Cragin Watersheds, Inner Basin Watershed, and Lake Mary Watersheds Management Areas contribute water to public water systems.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, page 20 - Desired Conditions for Water Quality and Water Quantity: consider addition of #8 that states "Watersheds that contain recharge areas for municipal water sources retain water quality for these beneficial uses."

Response:

One of the desired conditions in the Watersheds and Water section has been adjusted to recognize the connection between water quality, water, quantity, and the timing of water flows and water sources for municipalities. See FW-Water-DC-6. A separate desired condition addresses your suggestion that water quality be retained at levels that support designated beneficial uses. See FW-Water-DC-7.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, page 21 - Management Approaches for Water Quality and Water Quantity- 6th paragraph: this should include the threat of wildfire on municipal water and not be limited to fertilizers.

Response:

The management approach has been adjusted to incorporate your suggestions. See FW-Water-Management Approach, which states: Collaborate with volunteers, other agencies, private landowners, and other stakeholders on education, interpretation, and monitoring relating to water quality, public health, and fish and wildlife habitat especially in regards to threats to water quality from leaking septic tank systems; threats to water supply and water quality from wildfires; threats to downstream resources from the use of fertilizers; and threats to health and resources from improper disposal of diapers and other garbage or when state water quality standards have been exceeded.

Commenter: Valencia, Ruth

Comment:

Chapter 3. Management Areas and Special Areas, page 128- Upper Clear Creek General Description should include a statement about C.C. Cragin Reservoir being a municipal water supply for Northern Gila County, owned and operated by SRP.

Response:

The General Description and Background section for the Watersheds and Water section has been adjusted to address your concern. In recognition of the unique management concerns associated with the watersheds that serve the C.C. Crain Reservoir, Upper and Lower Lake Mary, and the Inner Basin, the Forest has identified these watersheds as separate management areas. See response to Concern #17 for additional information on these management areas. As adjusted, the General Description and Background section for the Watersheds and Water section recognizes that the watersheds within the C.C. Cragin Watersheds, Inner Basin Watershed, and Lake Mary Watersheds Management Areas contribute water to public water systems.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, Energy and Minerals, page 83- this entire section focuses mainly on minerals and does not touch on energy. SRP would like to see the Forest Service identify potential energy corridors. This will allow the Forest Service and the utilities to better manage current and future energy needs.

Response:

The Forest Plan has been adjusted in response to this comment. To clarify that the Energy and Minerals section addressed mineral energy sources (oil, gas, geothermal) and mining it has been renamed the Minerals and Mining section. Utilities and energy distribution are still addressed in the section titled Land Special Uses. The Forest Plan does not identify potential energy corridors. Rather, it includes plan components for utility corridors and the resources that could be impacted by utility corridors. These plan components for a framework that will guide any proposals to develop energy corridors on the Forest.

Comment:

Chapter 2. Forestwide Management, Desired Conditions for Special Uses, Land Special Uses FW-SpecUse-DC statement 2, page 97, states that "Utility lines, such as pipelines, power lines, fiber optic lines and telephone lines, are buried unless there are overriding environmental or technical concerns that would prevent burial." Burying lines -is not always feasible and/or practical. The burying of power lines still has an impact on the environment. Vegetation will need to be maintained in the right-of-way corridor and access will be needed in order to maintain the line integrity. Additionally, transmission lines are generally not buried.

Response:

Several plan components have been modified to address these concerns. This desired condition in the forestwide Special Uses section that addresses the impacts of utility and energy transmission corridors on the forest has been modified to address this concern and clarify its overall intent. Some commenters expressed concern with what appeared to be a general requirement to bury all infrastructure within these corridors, which can raise economic and environmental concerns. Other commenters expressed support for burying all infrastructure in these corridors and asked that vegetation clearing for these corridors be kept to a minimum. After considering all of these comments, the desired condition was adjusted to make it clear that its goal is for this type of infrastructure to not be visible across the landscape, rather than defaulting to burying it. The desired condition has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this type of infrastructure. See FW-SpecUse-DC-3. The corresponding guideline in the Special Uses section that addresses burial of utility lines has also been modified to recognize that economic concerns are appropriate factors (in addition to environmental and technical concerns) to consider when addressing the visibility of this utility lines. See FW-SpecUse-G-9. With regard to vegetation management, a Special Use desired condition was adjusted to acknowledge that there are legal mandates associated with the vegetation clearing for these corridors and it is a desired condition to meet those legal mandates. See FW-SpecUse-DC-2. While this desired condition recognizes that there is a level of vegetation clearing that is necessary for the safe operation of these corridors, it also recognizes the desire of moving towards other desired conditions applicable to the area. This includes the desired conditions for scenery. To support this desired condition, the forestwide Special Uses section has retained a guideline that requires the retention of vegetation that does not need to be cleared to meet legal mandates to allow screening for scenery, habitat for species, and corridors for wildlife movement. See FW-SpcUse-G-6. Concerns about co-locating infrastructure in an existing corridor before a new corridor is considered were addressed in several plan components in the forestwide Special Uses and Scenery sections. To consolidate this direction in one plan component, the guideline in the forestwide Scenery section that was designed to prevent the widening of utility rights-of-way in areas that have a moderate scenic integrity objective was merged with a similar direction in the forestwide Special Uses section. See FW-SpecUse-DC-3. Whether the additional infrastructure should be buried is addressed by the plan components discussed above.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, page 19, Watersheds - Guidelines, #1, add municipal watershed infrastructure.

Response:

This guideline has been changed to a management approach and was adjusted to incorporate your suggestion. In addition to roads, bridges, and power corridors, water supply has been added to the list of examples of community infrastructure. See the FW-Water-Management Approach which states: To enhance the protection of human health and safety, consider watershed treatments such as vegetation thinning, prescribed burning, and channel stabilization where protection of people, structures, and community infrastructure (e.g., roads, bridges, power corridors, and water supply) in and associated with the wildland-urban interface (WUI) are at risk.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, Guidelines for Special Uses, Land Special Uses FW SpecUse-G statement 1, page 99, states that "In accordance with scenery desired conditions and landscape character, utility rights-of-way should be located and maintained to conform with natural-appearing patterns of native vegetation." It is not always possible for utilities to maintain natural appearing vegetation. SRP and other utilities must comply with the National Electric Reliability Code (NERC) Reliability Standard in addition to other industry standards.

Response:

This guideline has been adjusted to address the concerns in this comment. Recognizing that complete conformity with natural-appearing patterns of native vegetation is not always possible, the guideline now requires structures to be designed to reduce the contrast with desired landscape character. See FW-SpecUse-G-7.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, page 23 - General Description for Wetland/Cienega and Reservoirs/Lakes: add C.C. Cragin as impoundment for municipal water use.

Response:

Reservoirs and other constructed waters have been reorganized into a new section entitled "Constructed Waters." The General Description and Background section of the Constructed Waters section lists the 14 reservoirs on the Coconino National Forest, including the C.C. Cragin Reservoir.

Commenter: Valencia, Ruth

Comment:

SRP encourages the development of a revised Plan that integrates and emphasizes the role the Forest has in protecting Arizona's water supply through the support of watershed health projects, including landscape scale forest restoration, vegetation thinning, and prescribed fire and in incorporating the needs of power utilities in order to provide safe and reliable generation and transmission to meet local and regional public energy demands.

Response:

The Plan has been developed to integrate the management of resources on the Forest. Water is recognized as a very valuable resource on the Forest and there are many plan components that are designed to ensure that forest management and activities on the Forest are conducted in a manner that maintains or improves this resource. In addition, three management areas specifically focus on water supply, the maintenance of water quality, groundwater recharge, and precipitation infiltration, and a low risk of uncharacteristic fire. The management areas are the Inner Basin, Lake Mary Watersheds, and C.C. Cragin Watersheds. See MA-InBsn-DC-1-4; MA-LkMary-DC-1 and G-1,2; MA-CCCrG-DC-1 and G-1,2. A management approach in the C.C. Cragin Watersheds Management Area reminds managers to coordinate with the Salt River Project and other stakeholders to improve the health and resiliency of the watersheds. It reads: Coordinate with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, Desired Conditions for Special Uses, Land Special Uses FW-SpecUse-DC statement 3, page 98, says "Power lines and towers are built (construction or reconstruction) to specifications compatible with raptor use." New structures are constructed to be bird friendly and bird guarding is installed per the Avian Power Line Interaction Committee (APLIC) Suggested Practices for Avian Protection on Power Lines- State of the Art in 2006 guidance document. SRP does not have suggested standards specifically for raptors; our suggested standards cover all bird species. Therefore, we suggest this statement be amended to incorporate all protected migratory birds.

Response:

This sentence has been merged similar direction in one of the special uses guidelines. To provide for broader application, it has been adjusted to refer to "wildlife" instead of "raptors." See FW-SpecUse-G-5. A full reference to Avian Power Line Interaction Committee (APLIC) has been added to the Special Uses section in Appendix D, Other Sources of Information. This reference is also located in the Wildlife, Fish, and Plant section in Appendix D.

Commenter: Valencia, Ruth

Comment:

Desired Conditions - Include "drinking water for municipalities".

Response:

The Watersheds and Water section includes a desired condition and a guideline regarding water quality and supporting identified designated beneficial uses. This plan direction strategically addresses drinking water for municipalities and a myriad of other designated beneficial uses that rely upon water quality. See FW-Water-DC-7 and FW-Water-G-5.

Commenter: Valencia, Ruth

Comment:

Chapter 2. Forestwide Management, page 18, Watersheds - Description: the Forest should include not only municipal watersheds that are under special use authorization, but should also include areas that have surface water impoundments that provide municipal water, such as C.C. Cragin Reservoir.

Response:

The General Description and Background section for the Watersheds and Water section has been adjusted to address your concern. In recognition of the unique management concerns associated with the watersheds that serve the C.C. Crain Reservoir, Upper and Lower Lake Mary, and the Inner Basin, the Forest has identified these watersheds as separate management areas. See response to Concern #17 for additional information on these management areas. As adjusted, the General Description and Background section for the Watersheds and Water section recognizes that the watersheds within the C.C. Cragin Watersheds, Inner Basin Watershed, and Lake Mary Watersheds Management Areas contribute water to public water systems.

Commenter: Valencia, Ruth

Comment:

Chapter 1. Background, page 3, Conditions and Trends- This section should also address water sources for municipalities, like C.C. Cragin Reservoir.

Response:

This Background section in the Forest Plan is a summary of trends and conditions that were identified in the early phases of this planning effort and is accurate as written. Although this section does not specifically mention water sources for municipalities or C.C. Cragin, the Forest Plan provides direction that addresses water sources for municipalities. See the forestwide direction in the Watersheds and Water section and the management area direction in the Inner Basin, Lake Mary Watersheds, and C.C. Cragin Watersheds Management Areas.

Commenter: Valencia, Ruth

Comment:

One item to note is the 2010 Memorandum of Understanding (MOU) between several federal departments, providing for the coordination among federal agency reviews of electric transmission facilities, was not referenced in the new plan. The MOU was created to help improve efficiency in coordinating the processes and procedures of the various federal agencies in the development of energy projects. SRP recommends the MOU should be referenced in the Proposed Plan as a valuable tool to be utilized in the maintenance and development of energy projects.

Response:

The Forest Plan has been adjusted in response to this comment. The MOU regarding coordination in federal agency review of electric transmission facilities on federal land has been added to the Forest Plan in the Special Uses section in Appendix D, Other Sources of Information.

Commenter: Valencia, Ruth

Comment:

While National Forests put conditions on the maintenance of a line granted under a special use permit, the utility also must comply with the maintenance standards (including vegetation maintenance) enforced by the North American Electric Reliability Corporation (NERC). NERC's standards are required by and must be approved by the Federal Energy Regulatory Commission (FERC). SRP recommends that the final Land Management Plan include NERC compliance requirements for vegetation clearing within and adjacent to energy corridors.

Response:

The concern related to vegetation management in utility rights-of-way is addressed in other plan direction in the Special Uses section. Vegetation clearing in utility corridors that meets legal mandates is a desired condition. See FW-SpecUse-DC-2. A guideline further clarifies that vegetation in utility corridors is only retained if it does not interfere with meeting vegetation clearing requirements for the corridor. See FW-SpecUse-G-6.

Commenter: Valencia, Ruth

Comment:

vegetation must be managed under existing transmission lines and under new future lines. This is done to prevent electric current from arcing from the line to the vegetation that is too close to the lines and to keep trees from falling into the line. The Forest Service should consider the need for utilities to address hazardous vegetation within and along the edge of their rights-of-way. This is important when restrictions are placed on the removal of vegetation in certain size classes. SRP supports a Region-wide amendment to the current 1996 Record of Decision for the Amendment of Land and Resource Management Plans to ensure utilities in Arizona have the ability to manage the integrity of their electric systems in order to deliver safe reliable power to their customers.

Response:

The concern related to vegetation management in utility rights-of-way is addressed in other plan direction in the Special Uses section. Vegetation clearing in utility corridors that meets legal mandates is a desired condition. See FW-SpecUse-DC-2. A guideline further clarifies that vegetation in utility corridors is only retained if it does not interfere with meeting vegetation clearing requirements for the corridor. See FW-SpecUse-G-6.

Commenter: Valencia, Ruth

Comment:

SRP also realizes the National Forest Service must strike a balance between the nation's energy needs, the development of energy projects and expansion of electrical transmission lines with the protection of public lands for current and future generations. Access to operate and maintain infrastructure and rights-of-way must be allowed to ensure the delivery of safe reliable power.

Response:

The Roads and Facilities objective does not make a decision to decommission any particular road on the Forest. Those decisions will be made on site-specific proposal that involve coordination with stakeholders. The Roads and Facilities objective to decommission 200 to 800 miles of unauthorized and system has been adjusted to clarify that the decommissioned roads will not be roads that the Motor Vehicle Use Map has identified as open to the public. See FW-RdsFac-O-1. This objective is aligned with the ongoing travel management effort and is not a decision to create additional, new limitations to motorized use on the Forest. To address the concern about retaining access for utilities, a management approach has been added in the forestwide Roads and Facilities section, which reminds forest managers to: Work closely with utilities to ensure access to rights-of-way and infrastructure.

Commenter: Valencia, Ruth

Comment:

SRP supports the Four Forest Restoration Initiative (4FRI) and the efforts undertaken by the Coconino National Forest (among others) to carefully consider the need and implementation of large-scale restoration activities, at a rate that will significantly minimize the risk of catastrophic fire. Tremendous time and resources have been expended on the 4FRI effort, both by the four forests, as well as by numerous stakeholders and interest groups. Inasmuch, the selection of an alternative must be consistent with the intent of 4FRI and should not limit landscape application of a variety of restoration tools.

Response:

No change has been made to the Forest Plan in response to this comment. The Forest Plan does not limit the size of landscape restoration efforts, nor does it limit restoration tools that could be used.

Comment:

As was indicated by the Vegetation and Fire Specialist Report, Wilderness Designations, Special Areas, and ROS classifications such as Primitive and Semi-Primitive Non-Motorized are all exceptionally limiting in terms of managing wildland and prescribed fire and allowing for the mechanical treatments needed for restoration activities. Although these land classifications are often adopted to promote the protection of threatened resource values, the paradox is they are much more difficult to protect due to policy limitations on accessibility and tools that can be used.

Response:

The Forest received comments suggesting that some or all of the Potential Wilderness Areas (PWAs) should be included or removed from the alternatives for a variety of reasons. The Forest was also asked to explain why some PWAs were included in Alternative B as Recommended Wilderness Areas (RWAs) while other, apparently similar, PWAs were not included in Alternative B. One of the main questions centered on why some PWAs with an Availability ranking of "medium" were included in Alternative B while other were not. In response to these comments, the Forest reviewed the wilderness evaluation effort and identified ways to respond to these comments. The process for identifying and evaluating PWAs is described in Forest Service Handbook 1909.12 Chapter 70. Following this process, the Forest prepared a Potential Wilderness Evaluation Report and a Wilderness Need Evaluation. These documents have been used to determine which PWAs should be included in alternatives developed for the forest plan revision effort. The wilderness evaluation process began by inventorying the entire Forest to develop an initial list of potential wilderness areas. The inventory process is described in Appendix A of the Wilderness Evaluation Report (USDA Forest Service 2016). The inventory criteria were applied based on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. This information was gathered using GIS data available at the time of the inventory and the knowledge of District and Forest staff concerning inaccuracies in that data and on-the-ground experience. This process identified 37 potential wilderness areas that were determined to meet the criteria. These 37 areas that met the inventory criteria were evaluated for wilderness capability following FSH 1909.12 Chapter 72.1. The capability ranking identifies the presence of wilderness character (Natural, Undeveloped, Outstanding opportunities for solitude and primitive recreation, special features and values, and manageability). The presence of non-native species can affect the capability ranking. Ten of these areas rated high in capability and were taken forward for further analysis into the availability and need analysis because they exhibit the necessary wilderness character. Five of these areas that rated medium in capability were taken forward for further analysis into the availability and need analysis in response to requests from the public. These 15 PWAs were then ranked for availability and need. The availability ranking weighs value of and need for the wilderness resource compared to the value of and need for other resources. The need rankings are based on the PWA's potential contributions of wilderness opportunities, in terms of social and ecological considerations, to the National Wilderness Preservation System. The Bismarck and Whitehorse potential wilderness areas were not carried forward because the Arizona National Scenic Trail crosses them; designating these areas as wilderness would conflict with the desire to allow mechanized use on this trail. Through this process 13 PWAs were identified. Alternative C proposes to recommend all 13 of the PWAs. Alternative B proposed to recommend three of the PWAs for a variety of reasons discussed in the Draft Environmental Impact Statement. Some commenters questioned the reasons offered for the inclusion of these three PWAs and asked the Forest to clarify the rationale. To provide a more definitive process for identifying the PWAs to include in the alternatives, the Forest developed a 3-step process and re-examined the 13 PWAs that were included in alternatives analyzed in detail in the Draft Environmental Impact Statement. Additional information on this process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The first step removed all PWAs that did not have a rating of medium or higher for capability, availability and need. This removed the White Horse, Bismark, Railroad Draw, and Deadwood Draw PWAs, all of which were rated low for availability. Applying this screen ensured that the potential wilderness areas that were being considered for recommendation were not of low quality or burdened with long term commitments of resources for incompatible uses or difficult conflicts if the area were designated as wilderness. The second step considered the availability rating. In response to a comment on how the availability process resulted in unduly low ratings, the Forest reviewed the process for determining availability. That process is described in Appendix C of the Potential Wilderness Evaluation Report. That process applies an availability rating

of medium to a PWA that has two or more resources that have planned or existing uses that are not compatible with designated wilderness. The Forest reviewed and confirmed that each PWA with a medium availability rating had two or more resources that have planned or existing uses that are not compatible with designated wilderness. However, during this review it was observed that some of these PWAs had many more than two of such resources. It was also observed that the distribution of these resources across a PWA varied widely. Taking this information into account, the Forest decided to review the availability rating on every PWA. As noted above, a rating of medium is applied to a PWA when it has two or more resources that have planned or existing uses that are not compatible with designated wilderness. Still, there can be a substantial difference between a PWA with a few incidences of these resources and another PWA with many instances of these resources. Furthermore, the weight to be given to these resources can vary based on their location within the PWAs. Resources on the periphery may impact the PWA less than resources located deeper within the PWA because access to and activities associated with these resources would have less impact on the character of the PWA. To differentiate between PWAs given an availability rating of medium, the Forest decided to break the medium rating into two parts. While both parts would still have two or more resources that have planned or existing uses that are not compatible with designated wilderness, one part would have fewer incidences of such resources and those resources would be located closer to the outer edges of the PWAs. The other part of the PWAs with a medium availability rating would be the remaining PWAs that had many resources that have planned or existing uses that are not compatible with designated wilderness, and/or PWAs where those resources were not located near the outer boundaries of the PWA. To complete the availability rating step, the Forest removed all PWAs that did not have an availability rating of "medium +" or higher. This removed the Cedar Bench, Black Mountain, Cimmaron-Boulder, Hackberry, and Tin Can PWAs areas from consideration for Alternative B. The purpose of this screen was to compensate for the wide range that was established by the medium category for availability. Rather than choose all or none of the PWAs with a medium category of availability, this screen provided a process to select PWAs that were on the high end of the medium category of availability. Additional information on this part of the process is available in the Public Involvement and Alternative Development section in the Potential Wilderness Evaluation Report. The third step removed the PWAs that were in Inventoried Roadless Areas. This removed the Walker Mountain, East Clear Creek, and Barbershop potential wilderness areas. The purpose of this screen was to retain management flexibility in areas that already had comprehensive management direction for resource protection. After applying these three steps, the remaining PWAs were Strawberry Crater, Abineau, and Davey's. After approving this review process and considering the outcome, the Forest Supervisor and the Regional Forester agreed that Alternative B should be modified to make the Strawberry Crater, Abineau, and Davey's PWAs the recommended wilderness areas. To reflect this change, Alternative B is now referred to as Alternative B (modified). Alternative C remains unchanged and still recommends Strawberry Crater, Abineau, and Davey's, as well as the ten other PWAs. The effects of the wilderness recommendations under alternatives B (modified) and C are analyzed in the environmental impact statement. Alternatives A and D still have no recommended wilderness areas. The effects of not including any recommended wilderness areas alternatives A and D are analyzed in the environmental impact statement.

Commenter: Valencia, Ruth

Comment:

Significant investment has been made by SRP and the Town of Payson to ensure the reservoir infrastructure, and management of such, will meet the needs of municipal and domestic water users in Payson and the Phoenix metropolitan area. The reservoir will be the primary drinking water source for Payson and is anticipated to be the primary water source for many of the other communities located within Northern Gila County. It is imperative that the Forest Service manage and care for the C.C. Cragin watershed in a manner that protects human health and safety in relation to the reservoir water supply through watershed treatments, such as vegetation thinning or prescribed burns, to prevent catastrophic events such as wildfire that currently have a high probability of occurring.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrg-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrg-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Commenter: Valencia, Ruth

Comment:

In addition to the delivery of this water for use by municipal, agricultural and commercial users within the SRP water service territory, a portion of the reservoir storage was made available for municipal and domestic uses in Northern Gila County, in particular the Town of Payson and other Northern Gila County communities. Consequently, as part of the process in updating the Coconino Land and Resource Management Plan, the watershed of the C.C. Cragin reservoir should be designated as a municipal watershed and included as such in Background Descriptions, Desired Conditions and related Objectives.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrG-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrG-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Commenter: Valencia, Ruth

Comment:

a Desired Condition should be included that lays out the importance of the watershed, forest health, and the protection of the long-term water supply.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrG-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrG-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Commenter: Valencia, Ruth

Comment:

Objectives: Add objective of managing C.C. Cragin Watershed as a municipal watershed.

Response:

The Forest Plan has been adjusted in response to these comments. Separate management areas have been identified for the Inner Basin, C. C. Cragin watersheds and the Lake Mary watersheds. These Management Areas include sections on General Description and Background, Desired Conditions, Guidelines, and Management Approaches that expand on forest-wide guidance and complement this unique management scenario. Desired conditions promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. See MA-InBsn-DC-4, MA-LkMary-DC-1, and MA-CCCrG-DC-1. Guidelines in the Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. See MA-LkMary-G-1 and 2, and MA-CCCrG-G-1 and 2. A desired condition in the Inner Basin Management Area would also maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure and limit dispersed recreation to day-use traffic, by foot or bicycle, to maintain water quality and watershed function. See MA-InBsn-G-4 and 7. In addition, a desired condition in Wildland Urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure. See FW-WUI-DC-2. A Management Approach recommends continuing collaboration with the Lake Mary Technical Advisory Group for the purpose of protecting and improving water quality and quantity in the domestic water supply and the downstream Walnut Creek riparian area. Another Management Approach recommends cooperation with the City of Flagstaff and National Park Service to develop study proposals and projects designed to evaluate best management practices, reservoir modifications, and/or operational criteria to address the objectives of maintaining the quality of the water supply and increasing the likelihood of flood flows and improvement of the inner-canyon environment in Walnut Canyon National Monument (per the Stipulation Between The City of Flagstaff and the United States on Behalf of the National Park Service and the Forest Service). A Management Approach in the C.C. Cragin Watersheds Management Area recommends coordination with the Salt River Project, National Forest Foundation, Town of Payson, and the Bureau of Reclamation, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, Arizona Elk Society, the local community, and other stakeholders to proactively improve the health and resiliency of the C.C. Cragin Watersheds Management Area.

Commenter: Vojta, Christina

Comment:

Although the Monitoring Strategy is intended to be broad, it would be worth adding a column to Table 16 that lists the monitoring indicator(s) for each question, so that you can understand internally, as well as display to the public, the types of data needed to answer each question. In a few cases, you have already included indicators under the column of Possible Methods and Data Sources. For example, for question 3, "change in species composition and cover frequency" is an indicator, not a method, and could be moved to a new column, Monitoring Indicator. Questions 5 and 16 also contain useful monitoring indicators.

Response:

The Monitoring Strategy and Plan in the Forest Plan have been reviewed and modified in response to this concern. Key changes include clarifying the questions, identifying the scale, having more easily understood metrics that tie to the data sources for each monitoring question. Acronyms were spelled out in place and a footnote was added to provide additional information on the data sources that would be used by the Monitoring Plan.

Commenter: Vojta, Christina

Comment:

For question 3, since you have so many different PNVT's listed and each has a different set of desired conditions, you could summarize the monitoring indicators across all PNVT's by stating, "proportion of each PNVT in specific seral stages or plant communities; status of specific indicators (e.g., snag density or grassland cover), depending on PNVT". For question 11, the indicators would likely be number of projects accomplished, whereas for question 12, the indicators would be "change in abundance, site occupancy, or distribution for selected species" (or for MIS, if that is the extent of the population monitoring).

Response:

The Forest Plan has been adjusted in response to this comment. All of the monitoring questions included in the Monitoring Plan in Chapter 5 of the Forest Plan have been reviewed. Each question now clearly states the evaluation criteria and data sources to be used to evaluate the monitoring questions. Specific indicators have been identified.

Commenter: Vojta, Christina

Comment:

I understand the desire for the monitoring questions to evaluate the role of management activities in the context of adaptive management. However, the wording of many of the questions is directed at only evaluating management, and not directed at the condition of the resource. Questions that begin with "How much have management activities contributed to..." imply that they would be answered by a qualitative value that expresses the role that management has played (e.g., a small, moderate, or large role). Questions 3, 4, 5, 6, 8, 10, 12, and 13 are phrased in this way. It seems that the Coconino would also want to know whether the condition of the resource has been maintained or has moved closer to a desired condition. Consider rephrasing these questions as follows: "Has the forest achieved or moved closer toward desired conditions and objectives related to [resource x] as a result of management activities?" That way, the question can be answered in terms of units of the resource (e.g, percent of each vegetation cover type in specific seral stages, and how these compare to the desired conditions.

Response:

Many of the monitoring questions in the Monitoring Plan have been adjusted in response to this suggestion. Some questions simply ask if certain elements in the desired condition for a resource are within the range of desired conditions. Other questions follow the example offered by the commenter and ask how management activities have contributed to maintaining or making progress toward the desired conditions for particular resources.

Commenter: Vojta, Christina

Comment:

This observation also applies to the three bullets listed on the first page of the Monitoring Strategy (p. 177). Regrettably, none of these bullets pertain to the condition of the resources themselves. I suggest the following revision to the first two bullets, so that the emphasis of the first bullet would be on the effects of management activities, and the emphasis of the second bullet would be on progress toward meeting desired conditions. * What are the effects of resource management activities on the productivity of the land and on progress toward achieving desired conditions? * Has the forest achieved or moved closer toward desired conditions and objectives identified in the plan?

Response:

Many of the monitoring questions in the Monitoring Plan have been adjusted in response to this suggestion. Some questions simply ask if certain elements in the desired condition for a resource are within the range of desired conditions. Other questions follow the example offered by the commenter and ask how management activities have contributed to maintaining or making progress toward the desired conditions for particular resources.

Commenter: Vojta, Christina

Comment:

I don't see a monitoring question that addresses invasive plants, although question 5 addresses aquatic invasive species. The desired condition for invasive species is to have them "absent or exist at levels where they do not disrupt ecological functioning or affect the sustainability of native and desirable nonnative species." I recommend adding a monitoring question that addresses the relationship of management actions such as thinning, prescribed fire, and grazing to changes in the occurrence of targeted invasive plant species. Suggested wording is "Has the occurrence or distribution of selected invasive plant species (ie., bull thistle, diffuse knapweed, and cheatgrass) changed as the result of management actions? This wording would allow for monitoring management actions to eradicate or reduce invasives, as well as actions that might increase them. The monitoring indicator would be the proportion of management sites surveyed where one or more of the selected species was observed, or you could set a threshold such that being "observed" meant it occurred across 5% or more of the management site. For this monitoring objective, the data precision could be class B, a quick ocular estimate of invasive species across a randomly-selected subset of sites that have received active management in the past five years.

Response:

A monitoring question related to invasive plants has been added to the Monitoring Plan in response to this comment. See Monitoring Question 11 in Chapter 5 of the Forest Plan.

Commenter: Wells, Ray

Comment:

Out National Forest should be regulated for multiple use benefit to the public like originally intended, and without all the frivolous regulations!

Response:

The Forest Plan is designed to contribute to ecological, social, and economic sustainability focused on meeting the needs of the present generation without compromising the ability of future generations to meet their needs. The Forest Plan gives direction to manage the forest consistent with the Multiple Use-Sustained Yield Act of 1960 and provides goods and services including outdoor recreation, timber, range, watershed, wildlife, and fish. This revision was conducted under the legal framework of the National Forest Management Act, and the provisions of the 1982 Planning Rule, as allowed by the 2012 Planning Rule language (36 CFR 219.7(b)(3)). Management of national forests is jointly based on the principles of conservation and multiple use. Multiple uses are not prioritized and are consistent with desired conditions for plan resource areas and were considered in the effects analyses. The Multiple Use-Sustained-Yield Act of 1960 (section 1) states that, "the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." The National Forest Management Act (section 6(e)(1)) states that in revising plans, "provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use, Sustained-Yield Act of 1960, and in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness..."

Commenter: Williams, Todd

Comment:

Roads and Facilities: ADOT appreciates the recommendation to continue to work closely with other agencies and groups to identify wildlife linkages and barriers and to mitigate such threats during project design as well as for collaboration to meet future transportation needs (page 94). ADOT would like to encourage CNF to become involved in the long-range planning process to allow additional time for consideration of the most effective and efficient ways to incorporate wildlife permeability considerations in transportation projects. Please refer to the Supplement to the Four Agency Partnership Guidelines referenced above. The Supplement details the long-range planning process for ADOT and the other agencies.

Response:

The Roads and Facilities section of the Forest Plan includes a management approach reminding forest managers to: Cooperate with local and regional governments, Federal Highways Administration and Arizona Department of Transportation on the planning, design, construction, and maintenance of highway corridors. A reference to the Amended Memorandum of Understanding among the Arizona Department of Transportation, the Federal Highway Administration, Arizona Division, and the USDA, Forest Service, Southwestern Region Regarding the Construction, Operation and Maintenance of Highways in Arizona Crossing National Forest System Lands has been added to the Roads and Facilities section in Appendix D, Other Sources of Information.

Commenter: Williams, Todd

Comment:

It appears that some of the ADOT roadway corridors are shown in areas designated as needing SIO rehabilitation (Map 16, page 232). How would this be accomplished for road easements? Would the target be to achieve a moderate SIO in the easement? Would this be a Forest-led project or something ADOT is asked to add into transportation projects? As discussed above, ADOT has mainly preservation and safety projects planned in the near future. Would a separate process be required for including rehabilitation work with approval of each project that ADOT proposes? If this were to be required, it would need to be considered in ADOT's project planning and budgeting process.

Response:

Identification of an area on the SIO rehabilitation map helps the Forest get a complete picture of where there are needs for SIO rehabilitation. However, SIO rehabilitation is opportunity based and may not always be the primary purpose of a project. SIO rehabilitation could be included as part of a vegetation restoration project or a road maintenance or reconstruction project. The specific details on precise rehabilitation efforts, the desired outcome, and who would undertake the rehabilitation will depend on the project and will be determined at the project level based on site specific information. A management approach in the Scenic Resources section has been adjusted to remind forest managers to: Coordinate with other entities, such as the Arizona Department of Transportation, local governments, and commercial and private entities to protect scenic integrity on and adjacent to the national forest and to identify opportunities for SIO rehabilitation.

Commenter: Williams, Todd

Comment:

We suggest including mileposts for sections of roads with special designations in the document for clarity. We also recommend including information on state versus federal scenic road designation for the Scenic Byways section and referring to other documents and sections of LRMP that may affect management.[...]Other documents include the Four Agency Partnership Handbook, the USFS-ADOT MOU and possibly the Corridor Management Plans that have been developed under FHWA's guidelines (<http://www.azdot.gov/about/scenic-roads/corridor-management-plans/overview>). Other sections of the LRMP might include the Sedona/Oak Creek Desired Conditions and Guidelines (MA-SedOak-DC #2,22,28, 29, 32;MA-SedOak-G #1, 8, 9,17,20).

Response:

Several changes have been made to the Scenic Roads subsection of the Special Areas section in the revised Plan. The General Description and Background section has been adjusted to discuss the various federal and state scenic roads that cross the Forest. Mileposts for the state scenic roads have been added to the General Description and Background section to clarify their locations. The other documents have been referenced in the Scenic Roads section in Appendix D of the revised Plan. To ensure that desired conditions for scenic roads are taken into account when road corridors and other associated infrastructure are designed, constructed, and maintained, a Roads and Facilities desired condition was adjusted. See FW-RdsFac-DC-2.

Commenter: Williams, Todd

Comment:

SR 179 and SR 89A are discussed beginning on page 134 as part of the Sedona/Oak Creek Management Area, which states that they are expected to continue to be managed to a rural Recreation Opportunity Spectrum (ROS) level adjacent to the roadways. How does this interface with the Desired Conditions for All Scenic Byways (SA-Tri&Bwy-Bywy-All-DC, page 163) and for the Red Rock All-American Road (SA-Tri&Bwy-RedRck-DC, page 165)?

Response:

This desired condition has been adjusted in response to this comment. Because management related to Recreation Opportunity Spectrum (ROS) settings is an issue that applies to the whole forest, some of this direction has been moved into the forestwide All Recreation section. See FW-Rec-All-DC-4. This desired condition has been adjusted to remove the recognition that there may be inconsistencies with the desired condition in certain areas. The desired condition states that ROS settings provide the general context for social encounters and access in particular locations, but acknowledges that localized areas within a particular setting may be different from the overall setting. In addition to this forestwide direction, all four of the Sedona-Oak Creek management areas include a desired condition for social encounters to be consistent with ROS settings. A guideline in the Red Rock Management Area specifically addresses conditions in Broken Arrow Basin. See MA-RedRock- G-5: The parking, staging areas, and main four-wheel drive road at Broken Arrow Basin should be managed for the ROS setting of 'rural' because of the area's high level of use. The physical setting and maintenance level of the road should be managed as semi-primitive motorized to be consistent with the surrounding area. The reference to anticipated development of State Routes 179 and 89A have already occurred, so that direction has been removed from the Forest Plan.

Commenter: Williams, Todd

Comment:

The All Scenic Byways section, beginning on page 163, references Historic Route 66 and SR 179, but not SR 89A (Sedona- Oak Creek Scenic Road and Dry Creek Scenic Road) or SR 180 (San Francisco Peaks Scenic Road).

Response:

The Scenic Roads section of the revised Plan has adjusted to recognize the Dry Creek Scenic Road, the San Francisco Peaks Scenic Road, and the Sedona-Oak Creek Canyon Scenic Road and to clearly identify management direction associated with these roads.

Commenter: Williams, Todd

Comment:

All Scenic Byways: ADOT would appreciate an opportunity to meet and discuss the approach for maintenance of scenic roads within CNF. These roads are maintained with a reduced or minimal "clear zone" adjacent to the pavement due to scenic considerations and require maintenance to keep the roadway free of obstructions from fallen vegetation or rocks. More clearly defined conditions and review procedures to perform maintenance activities on these roads relative to aesthetic and other considerations would be beneficial.

Response:

The Forest Plan provides a strategic framework for managing scenic roads. For example, a Scenic Roads desired condition seeks to preserve and promote scenic roads in a manner that protects their intrinsic qualities and enhances visitor appreciation of their resources, consistent with each designation. See SA-ScenicRds-DC-1. The specific management actions, such as maintenance activities, that need to be taken to meet this desired condition are identified at the project level based on site specific information.

Commenter: Williams, Todd

Comment:

We request clarification of the SIO that ADOT will be requested to conform with for road facilities and whether associated buildings will fall within this category. Does exemption from the high SIO mean that the moderate SIO will be applied? ADOT proposes instead of applying the area-wide SIOs, developing desired conditions for different types of road facilities, such as interstates, state highways and scenic roads. ADOT would like to meet to discuss this approach in more detail. Please also see the attached 2012 BLM Sonoran Desert National Monument Resource Management Plan Map 3, which shows buffers along the highway corridors that were designated as Visual Resource Management Class III, a lower requirement than for the surrounding land.

Response:

The Forest Plan has been adjusted in response to this comment. The Scenic Resources desired condition still includes the exempts travel route structures from meeting high scenic integrity objectives in the immediate foreground. The desired condition has been expanded to explain that how the exemption is applied is determined at the project level based on site specific information. This exemption, while not a specific delineated buffer as suggested, allows the scenic integrity objective within a highway corridor to be lower than that applied to the surrounding land. The Forest recognizes the need for a more consistent approach on scenery management in these situations. The Coconino NF would be glad to work with you and other Arizona forests to develop specific guidance on this topic.

Commenter: Williams, Todd

Comment:

Desired Conditions for Roads and Facilities {FW-RdsFac-DC} #3 states that "roads under easement are maintained to Forest Service standards" (page 91). ADOT requests adding a reference to the conditions of the easement deed agreements and the Four Agency Partnership Guidelines referenced above; a link to the online document is included in the references at the end of this letter.

Response:

The desired condition has been adjusted to incorporate the suggestion in this comment. As adjusted, the desired condition acknowledges that road maintenance requirements can be satisfied by meeting Forest Service standards or the terms of the authorization for the easement or permit. See FW-RdsFac-DC-3.

Commenter: Williams, Todd

Comment:

Wildlife, Fish and Plants: Guideline #10 (FW-WFP-G-10) states that road ROW fences are recommended to be located 1/8 mile from roads (page 75). ADOT would like to confirm that if existing roads are upgraded and the easement is not wide enough to allow this distance to the ROW fence, this would be a defensible reason for deviation from this guideline without a plan amendment.

Response:

This guideline has been reworded to remove the one-eighth mile distance and allow for site specific designs that allow safe passage for wildlife prone to movement restrictions. See FW-WFP-G-5.

Commenter: Williams, Todd

Comment:

USFS Region 3, FHWA and ADOT also collaborated on the USFS document Environmental Assessment for Management of Noxious Weeds and Hazardous Vegetation on Public Roads on National Forest Lands in Arizona, which regulates ADOT's herbicide use on USFS lands. The EA allows use of herbicide with approval on areas up to 200 feet outside of the roadway easement if needed to effectively control vegetation. The associated Memorandum of Understanding provides a strategy for ADOT-USFS coordination regarding the presence of invasive plants and hazardous vegetation and *planned activities to control and/or remove this vegetation. Incorporation of these documents and guidelines into the LRMP and consideration of normal maintenance and preservation activities so that Plan Amendments are not required for these activities to proceed would be appreciated.

Response:

The Forest Plan has been adjusted in response to this comment. A reference to the Amended Memorandum of Understanding regarding the construction, operation and maintenance of highways in Arizona crossing National Forest System Lands has been added to the Roads and Facilities section in Appendix D, Other Sources of Information.

Commenter: Williams, Todd

Comment:

The Four Agency Partnership between ADOT, the Federal Highway Administration (FHWA), the US Forest Service (USFS) and the Bureau of Land Management (BLM) was established to provide a framework for the agencies to actively and effectively cooperate with each other throughout the planning, design, construction and maintenance of highway corridors. The process is formalized in a Memorandum of Understanding (MOU) between USFS, FHWA, and ADOT and in the 2008 manual: Guidelines for Highways on BLM and USFS Lands and 2011 Supplement: Guidelines for Long-Range Planning, which are available on the ADOT website (see references at end of letter). This manual describes accepted procedures, as well as the needs and concerns of each agency in an effort to minimize conflict and facilitate the creation of safe, environmentally sound and aesthetically pleasing highway corridors.

Response:

References to the guidelines for highways and the memorandum of understanding have been added to Appendix D, Other Sources of Information, of the Forest Plan

Commenter: Williams, Todd

Comment:

Recreation Opportunity Spectrum: The ROS designation adjacent and in easements could impact how ADOT maintains and upgrades highway corridors. Semi-primitive non-motorized is designated along a portion of State Route 260 (Map 14, page 230 and interactive maps online). It is unclear how large a buffer is provided between the ADOT easement and the area designated for semi-primitive non-motorized use. ADOT requests that the buffer between any wilderness and semi-primitive ROS designated areas would be at least 200 feet to maintain consistency with the Environmental Assessment for Management of Noxious Weeds and Hazardous Vegetation on Public Roads on National Forest System Lands in Arizona (US Forest Service Region 3, 2003; Proposed Action, page 10) allowing treatment of areas up to 200 feet outside of road easements for control of noxious and invasive plant species.

Response:

The process used to model ROS settings on the Forest applied a one-half mile buffer to "better than primitive" roads. "Better than primitive" roads include National Forest System roads with an operational maintenance level of 3, 4, or 5. State highways like State Route 260 fall into this category. The area within the buffer on these roads was given a classification of Roaded Natural. Some adjustments were made to this buffer in the East Clear Creek Watershed where only a 100 foot buffer of the Roaded Natural class was applied to the "better than primitive" roads. Beyond that 100 foot buffer the areas were classified as Semi-primitive Non-motorized. This adjustment should not impact the one-half mile Roaded Natural buffer on state highways. Accordingly, the ROS settings for the Forest should not impact the ability of the Arizona Department of Transportation to conduct maintenance and treatment of noxious and invasive plant species within or adjacent to their highway easements. See the Coconino National Forest Recreation Opportunity Spectrum Inventory Report for additional information.

Commenter: Williams, Todd

Comment:

Scenery Management: ADOT appreciates the consideration for exempting interstates, highways and regional travelways and associated structures, with the exception of scenic byways, from high Scenic Integrity Objectives (SIO), as stated on page 113. We also appreciate the allowance for functionality of wildlife structures in relation to the SIOs in Guideline #10 (FW-Scenic-G) on page 115.

Response:

Although the Scenic Resources desired condition that acknowledges that highways and regional travelways and associated structures are exempted from meeting high SIOs in the immediate foreground has been edited for clarity, the exemption has been retained. See FW-Scenic-DC-9. The Scenic Resources guideline that addressed exemption of wildlife structures from SIOs has been incorporated into that desired condition. See FW-Scenic-DC-9.

Draft