Chapter 2. Alternatives, Including the Proposed Action

Introduction

This chapter describes each alternative considered for the revision of the 1987 plan. It also presents the alternatives in comparative form, describing the differences between each and providing a basis for choice among options for the responsible official. Some of the information used to compare alternatives is based on the land management plan decisions (e.g., objectives, suitability) and some of the information is based on expected outcomes of implementing each alternative (e.g., amount of forest products available).

Alternative Development

The proposed plan (alternative B) was developed iteratively in a collaborative manner to address the need for change. In August 2008, the forests released an initial set of draft desired conditions for public and forest employee review and feedback. After incorporating comments and refining the desired conditions, the forests released a working draft land management plan for review and comment in June 2009. These collaborative efforts between the Forest Service and external groups and individuals led to development of the proposed plan (alternative B). Two additional alternatives (alternatives C and D) were generated based on issues not addressed by the proposed plan. These issues are listed in chapter 1 under the section "Issues that Served as the Basis for Alternative Development."

Alternative C was developed to respond to issues by placing more emphasis on treating vegetation mechanically to contribute to local and regional economic sustainability and maintain or move toward desired conditions. There is no emphasis to retain old growth to the greatest extent possible so there are more opportunities to meet forest products desired conditions. There is less land allocated to the Wildlife Quiet Area Management Area. This alternative places an emphasis on developed and motorized recreation opportunities and recommends less acreage for wilderness designation. This alternative identifies more land suitable for timber production and would offer more wood products.

Alternative D was developed to respond to issues by placing more emphasis on natural processes (use of wildland fire) as a restoration tool to maintain or move toward desired conditions. This alternative emphasizes the retention of all large and old trees. There is more land allocated to the Wildlife Quiet Area Management Area. This alternative places an emphasis on dispersed and nonmotorized recreation opportunities and recommends more acreage for wilderness designation. This alternative does not identify any lands as suitable for timber production and would offer fewer wood products.

Drafts of the proposed plan and alternatives were shared with the public and Forest Service employees during the spring of 2010. Four public meetings, an informal comment period, and meetings with forest employees were held to gather feedback as to whether these alternatives addressed concerns and whether the range of alternatives was adequate.

The interdisciplinary team, taking into account this feedback, met with the forest supervisor and received direction to refine the initial draft alternatives. This is reflected in the action alternatives (alternatives B, C, and D) below.

All action alternatives considered (1) comments from the public, other agencies, forest employees, and tribal governments and (2) scientific information from the "Analysis of the Management Situation." Each alternative had to meet the following criteria set by the forest supervisor and the forests' leadership team:

- Alternatives must follow existing laws, regulations, and policies.
- The forests will be managed for multiple uses as suitable.
- The alternatives must be realistic, implementable, and able to be monitored within anticipated future budgets.

The Notice of Availability announcing the release of the proposed plan and DEIS was published in the Federal Register (78 FR 11171) on February 15, 2013, which initiated a 90-day public comment period. Over 41,000 comment letters were received from individuals, organizations, agencies, and one tribe. These comments are summarized and responded to in appendix A. The comments did not uncover additional unresolved issues; therefore no new alternatives were analyzed in detail. The comments led to minor changes throughout the plan and environmental impact statement, all of which were within the scope of the analysis in the draft environmental impact statement (see "Summary of Changes" in chapter 1).

Alternatives Considered but Eliminated from Detailed Study

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives not developed in detail (40 CFR § 1502.14). Public comments received in response to the need to revise the land management plan provided suggestions for alternative methods to achieve the desired conditions. Some of these may have been outside the scope of revision, duplicative of the alternatives considered in detail, or determined to cause unnecessary environmental harm. Therefore, a number of alternatives were considered, but they were dismissed from detailed consideration for reasons described below.

June 2009 Working Draft Land Management Plan

The forests released a working draft land management plan for review and comment in June 2009. This alternative, based on public and agency input, evolved into what is now the proposed plan.

Initial Draft Alternatives

In March 2010, the forests released a set of three draft alternatives for public review and comment. These alternatives, based on public and agency input, evolved into the three action alternatives analyzed in this FEIS.

Alternatives with No Timber Harvest or Large Increase in Timber Harvest

These alternatives were considered to address public comments regarding whether timber harvesting should be allowed on the Apache-Sitgreaves NFs, and if so, at what level.

In the Multiple Use–Sustained Yield Act of 1960 (P.L. 86-517), Congress declared that national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. The National Forest Management Act of 1974 (P.L. 94-588) reiterates this commitment to multiple use. Given this legal direction, it was determined that an alternative to eliminate timber harvesting is inconsistent with the mission of the Forest Service.

Timber harvesting is a necessary management tool to maintain and restore vegetation communities to desired conditions, produce commercial wood products, create and maintain varied wildlife habitat conditions, and treat areas identified in community wildfire protection plans. An alternative that eliminates timber harvest would not contribute to these purposes and, therefore, is outside the scope of this decision.

An alternative that called for large increases in timber harvest was also considered but not analyzed in detail, because maximizing timber production would not meet the desired condition to manage and protect other resources. The action alternatives provide a range of timber harvest amounts at levels that account for other uses and resource needs. Large increases in cutting levels could have the potential to threaten the viability of some wildlife and/or fish species.

Alternatives with No Livestock Grazing

This alternative was considered in response to public comments preferring no grazing on the Apache-Sitgreaves NFs.

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. Also, it would not allow the attainment of the desired condition for livestock grazing to contribute to the social, economic, and cultural diversity and stability of rural communities. Therefore, a no grazing alternative is inconsistent with the mission of the Forest Service, the land management plan's desired conditions, and outside the scope of this decision.

Stocking decisions (amount of livestock grazing authorized) for specific grazing allotments are beyond the scope of this analysis. Grazing is authorized through term grazing permits (a long-term authorization subject to forestwide standards and guidelines), allotment management plans, and annual operating instructions. Changes to these authorizations would be made through project-level analyses.

See the "Livestock Grazing" section in chapter 3 for a discussion of rangeland suitability.

Minimum Management Alternative

This alternative was considered in response to public comments that there should be no or minimal human intervention in the management of the Apache-Sitgreaves NFs.

This 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. Active management is also needed to maintain or move toward desired conditions, including to restore forest ecosystems, maintain recreation opportunities, reduce the threat of uncharacteristic wildfires to communities, and maintain the availability of forest products.

Wilderness Alternatives

Requests for new wilderness areas were submitted by several groups.

These areas were considered in light of the evaluation of potential wilderness that was completed by the Apache-Sitgreaves NFs for the plan revision process. Portions of these external proposals are further considered in alternatives B, C, and D. Other portions were dismissed from detailed consideration because they did not meet the criteria for potential wilderness.

Wildlife Conservation Area Alternative

Based on input from several groups, an alternative was considered to manage portions of the Black Mesa and Lakeside Ranger Districts as wildlife conservation areas. The wildlife conservation area proposal included various components such as existing and new wildlife habitat areas, wildlife corridors, core black bear and mountain lion habitat, Mexican spotted owl protected activity centers, northern goshawk post-fledging family areas, and rivers eligible for designation under the Wild and Scenic Rivers Act.

Although this alternative was considered, it was not further analyzed because many of its components are included in the three action alternatives. Protected activity centers and post-fledging family areas are managed in all alternatives to conserve these species. The action alternatives include additional wildlife habitat areas (i.e., Wildlife Quiet Area Management Area) to help address habitat connectivity across the Mogollon Rim. Other areas (e.g., Natural Landscape Management Area, Recommended Wilderness Management Area) identified in the action alternatives also limit impacts to wildlife and wildlife habitat.

Alternatives to Designate or Remove Wild and Scenic Rivers

These alternatives were considered in response to public comments that specific river segments should be designated or removed from the National Wild and Scenic Rivers System. Designation or removal of a wild and scenic river is a congressional action.

The Apache-Sitgreaves NFs do not have any rivers designated in the National Wild and Scenic Rivers System; therefore, there are no rivers that can be removed. However, there are 25 rivers eligible or suitable for designation that must be managed to maintain or enhance their outstandingly remarkable values. Before a river can be recommended to Congress for designation into the system, a suitability study must be conducted. A suitability study for any additional river segments is beyond the scope of this plan revision process; it may be undertaken at some time in the future under separate analysis, as was done for KP Creek and the Blue River.

Changes to the Road and Motorized Trail System and Elimination of OHV Use

These alternatives were considered in response to public comments to change the road and motorized trail system and to eliminate the use of off-highway vehicles (OHVs).

Some public comments requested that, during the plan revision process, individual roads or trails or all unauthorized roads/trails be evaluated and either added to or removed from the transportation system. The land management plan provides a framework to guide future changes to the transportation system. Potential changes to the forests' transportation system would be

evaluated in separate project-level analysis including the implementation of the Travel Management Rule (36 CFR § 212). As a result, this alternative was dropped from detailed consideration.

Other public comments expressed a need to eliminate the use of OHVs across the forests. OHV use has historically been permitted on the forests; it is a contemporary use of the forests and provides access to various portions of the forests. Local counties, the State of Arizona, and nearby national forests also allow OHV use. Future analyses (e.g., implementation of the Travel Management Rule) would consider additional locations for OHV use and evaluate related resource impacts. As a result, this alternative was dropped from detailed consideration.

Expanding Existing Energy Corridors

Arizona Public Service, an Arizona electric utility company, recommended that the Forest Service establish designated corridors for all existing transmission facilities. In addition, they requested expansion of all existing corridors with high voltage and extra high voltage transmission facilities to a width of 3 to 5 miles.

Each of the action alternatives establishes an Energy Corridor Management Area that provides guidance for existing facilities. The management area boundary follows the existing rights-of-way. In order to increase the width of the corridor, further analysis and a project-level decision would be needed. It was determined that this is beyond the scope of this revision process and would not be considered in further detail.

Alternatives with No Road or Motorized Trail Construction and Road Density Requirements

Comments received on the proposed plan and DEIS recommend an alternative with no road or motorized trail construction and other comments requested the Forest Service set limits for road density.

An alternative to forbid new road or motorized trail construction was considered to not be feasible. For example, new road construction may be required when access to a particular resource or private inholding is needed. New motorized trails may be needed to provide motorized recreation opportunities, including destinations and loops. The action alternatives, including the plan, address the impacts of roads and motorized trails on forest resources. Any new road or motorized trail construction would only be authorized following project-level NEPA analysis and would be accomplished using best management practices (BMPs) to minimize resource impacts while providing for forest access needs.

An alternative to include a road density standard was considered; the standard would limit the road system to a minimum number of miles of road per square mile of land. This alternative was considered but not analyzed in detail because future project-level planning efforts, including the implementation of the Travel Management Rule, would determine the designated road system. Site-specific travel management planning will use the framework set by the plan (e.g., desired conditions, standards, guidelines) and consider potential resource impacts, access needs, public input, and alternative views instead of an arbitrary road density target. The action alternatives, including the plan, provide for the protection and management of healthy and sustainable soils, watersheds, and wildlife connectivity, which are the primary resource concerns associated with National Forest System roads and motorized trails.

Alternatives with No Mining and Drilling

Comments received on the proposed plan and DEIS supported recommending an alternative that would prohibit mining and drilling. This was considered, however Congress declared in the Mining and Minerals Policy Act of 1970 that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage the development of domestic mineral resources. In addition, the Forest Service does not have the discretionary authority to prevent mining of locatable minerals on public domain lands as prescribed by the 1872 Mining Law (as amended).

The action alternatives contain desired conditions, guidelines, and suitability determinations for minerals and geology related projects and activities, including surface occupancy stipulations. Any specific mining or drilling proposals would be evaluated to ensure consistency with the land management plan. Specific projects could be modified to include additional site-specific mitigation measures to protect forest resources.

Alternative with Maximum Treatments (Mechanical and Wildland Fire)

Comments received on the proposed plan and DEIS suggested an alternative that would maximize mechanical treatments (timber sales) and acres treated with wildland fire (planned and unplanned ignitions) with over 100,000 acres burned on an annual basis.

The action alternatives were developed to be realistic and implementable within anticipated future budgets (expected to be similar to current budgets). Alternative C represents the maximum mechanical treatments, while alternative D represents the maximum wildland fire treatments the forests anticipate being able to accomplish within the planning period. An alternative that would maximize both treatment types was not considered to be feasible based on anticipated future budgets.

Alternative with Different Livestock Grazing Management

Comments received on the proposed plan and DEIS recommended an alternative that provides a different strategy for managing livestock grazing than what was analyzed in the DEIS. It would provide management direction that would maximize long-term vegetative health through a conservative strategy toward grazing including restrictive standards to reduce unsatisfactory lands and improve forage and grassland habitat.

A change in the management of livestock grazing was not identified as need for change from the 1987 plan (see the “Purpose and Need for Change” section in chapter 1) and therefore, the topic of livestock grazing management did not drive alternative development.

All alternatives contain a primary desired condition for livestock grazing to “balance livestock grazing with available forage” on suitable grazing lands. Stocking decisions (amount of livestock grazing authorized) are authorized through term grazing permits (a long term authorization subject to forestwide standards and guidelines), allotment management plans, and annual operating instructions. Changes to these authorizations would be made through project-level analyses.

The plan provides direction for healthy and resilient vegetation, riparian areas, and water resources conditions in the short and long term. Therefore, the plan provides the framework for

livestock stocking decisions that would provide for the health of vegetation and retention of water and forage for wildlife because those decisions must be consistent with applicable plan direction.

Alternative Based on the Old Growth Protection and Large Tree Retention Strategy

Comments received on the proposed plan and DEIS recommended an alternative based on the Old Growth Protection and Large Tree Retention Strategy (OGPLTRS) developed by public stakeholders for implementation in Four Forest Restoration Initiative (4FRI).

Although OGPLTRS does not dictate a universal upper cutting size limit (diameter cap); it does universally dictate keeping all pre-European-settlement (old) trees in all cases. The OGPLTRS proposes very specific tree retention requirements that are not appropriate for a programmatic land management plan. It reduces the flexibility that project level decisionmakers may need to design treatments that promote site specific desired conditions. Concepts from the OGPLTRs could be analyzed and incorporated at the project-level, if applicable.

The action alternatives provide guidance to retain appropriate amounts of large/old trees and/or old growth. In addition, alternative D analyzes a strategy similar to OGPLTRS because it contains a standard to retain all old and large trees.

Alternative to Manage Forests as a Refuge for Fish and Wildlife

Comments received on the proposed plan and DEIS recommended an alternative that focuses on managing for biological diversity and at-risk species to address scientific uncertainty and controversy regarding climate change impacts and creates a safe harbor and refuge for fish and wildlife, even at the expense of competing multiple use activities, such as livestock grazing, timber production, and motorized recreation.

The alternative was not considered in detail because, by focusing solely on fish and wildlife habitat over other uses, it 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. Also, in light of changes predicted by current climate models (e.g., increased wildfires, greater vulnerability to invasive species, changes in timing of precipitation), there is a need to reduce vulnerability by maintaining and restoring resilient native ecosystems which would be an outcome in alternatives B, D, C, and A (in order from greatest resilience to least). Management practices that sustain healthy plant and animal communities (e.g., thinning for age class diversity and structure, reclaiming and restoring native grasslands) promote resilience and reduce opportunities for disturbance and damage.

The primary focus area, or revision topic, for the action alternatives is “Maintenance and Improvement of Ecosystem Health.” The alternatives provide specific direction to provide for biodiversity and protect endangered species, other animals, and habitat. They provide for the viability of all terrestrial and aquatic species.

Alternative to Compare Viability for the Mexican Spotted Owl

Comments received on the proposed plan and DEIS recommended an alternative that would include the following: (1) implement standards and guidelines from the 1987 plan, (2) forbid new

road construction in Mexican spotted owl protected activity centers (PACs), (3) incorporate fuel treatment concepts to minimize risk of stand-replacing fire in PACs, including large tree retention, management of surface fuels and sub-canopy forest structure, and spatial orientation of treatments, and (4) apply fuel treatment modeling in Mexican spotted owl habitat conducted by Northern Arizona University Forest Ecosystem Restoration Analysis. The intent of the alternative is to help the decisionmaker and the public compare impacts to Mexican spotted owl and its critical habitat.

This alternative was eliminated from detailed study because the implementation of 1987 plan standards and guidelines is considered in the alternative A analysis 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.

Alternative Proposed by Counties

Several Arizona counties (Gila, Graham, Greenlee, and Navajo) and the Eastern Arizona Counties Organization recommended a new alternative during the comment period for the proposed plan and DEIS. That alternative would have included provisions from existing alternatives to treat grasslands, increase logging, prioritize mechanical thinning over prescribed fire, consider more new motorized areas and trails in the future, prevent catastrophic wildfire, restore watersheds, and alter the designation of management areas. The alternative would also have proposed changes to rangeland management; support for local wood-based industries; guidance for TMR; guidelines to integrate the OGPLTRS; a comparison of the 10 priority watersheds; more clearly differentiating between degrading factors and their effects and between natural processes and management effects; providing more information on the proposed natural landscape areas; a rationale for proposed elimination of IRAs; more specific information on and plans for monitoring; and guidelines to integrate social and economic sustainability, science, and considerations into decision making.

This alternative was not considered for detailed study because several components were analyzed in alternatives in the EIS, or addressed in plan direction, or were beyond the scope of the plan and plan revision process. The suggested provisions from existing alternatives were analyzed as alternatives B and C in chapter 2 and 3 of the EIS. The plan provides a monitoring strategy in chapter 5.

The plan sets the framework for implementing TMR and the planning process for implementing TMR will address the issues of motorized big game retrieval, dispersed camping, firewood collection, and dispersed shooting. The plan's interdisciplinary team considered the OGPLTRS in its entirety, but recommended that it not be analyzed in detail. See the "Alternatives Considered but Eliminated from Detailed Study" section in chapter 2 of the EIS. The "Watershed" section in chapter 3 of the EIS was updated based on the recommendation to clarify degrading factors.

See the response to comment # 161.19 in the "Alternatives" section of appendix A for a complete explanation.

Alternatives Considered in Detail

In addition to the no action alternative (alternative A or the 1987 plan) and the proposed plan (alternative B), the Forest Service developed two additional action alternatives (alternatives C and D) to respond to issues raised by the public.

Elements Common to All Alternatives

All four alternatives have a number of features in common. In particular, they

- Comply with applicable laws, regulations, and policies (see appendix D of the proposed plan which accompanies this document)[5];
- Contain plan decisions including desired conditions (or goals), objectives, standards, guidelines, special areas, suitability, and monitoring;
- Share the same desired conditions for the resources of the Apache-Sitgreaves NFs. The desired conditions are described in detail in the proposed plan;
- Conserve soil and water resources and do not allow significant or permanent impairment of the productivity of the land;
- Provide protection for riparian areas;
- Maintain air quality that meets or exceeds applicable Federal, State, and/or local standards or regulations;
- Provide for and maintain diversity of plant and animal communities consistent with overall multiple-use objectives;
- Provide for species' viability by providing appropriate habitat that is well distributed across the planning area;
- Include measures for preventing the destruction or adverse modification of critical habitat for threatened and endangered species;
- Use a common list of management indicator species (MIS) and ecological indicators (EIs). The list of 17 MIS used in the 1987 plan was reviewed and modified (see the "Plan Set of Documents" for rationale). The following three MIS are used to compare and evaluate alternatives: Mexican spotted owl, northern goshawk, and pronghorn antelope. Aspen and riparian EIs are also used to compare and evaluate alternatives;
- Protect cultural resources;
- Recognize the unique status of American Indian tribes and their rights retained by trust and treaty with the U.S., including consultation requirements;
- Emphasize uneven-aged forest conditions, with allowance for some even-aged management, using a variety of vegetation management tools and methods;
- Use mechanical and wildland fire (planned and unplanned) treatments to meet desired conditions;
- During responses to wildland fire, risks to firefighters and the public are mitigated. Protection of human life overrides all other priorities;

[5] However, alternative C does not comply with the 2001 Roadless Area Conservation Rule. See the Inventoried Roadless Areas section on the following page for more information.

- Provide sustained multiple uses, products, and services (e.g., wood harvesting, grazing, recreation) in an environmentally acceptable manner;
- Protect the outstandingly remarkable values identified for the 23 eligible and 2 suitable wild and scenic rivers;
- Retain existing designated special areas (e.g., wilderness areas, Phelps Cabin Research Natural Area); and
- Manage the Blue Range Primitive Area and presidential additions as a primitive area until a congressional decision on wilderness is made.

Conformance with the Forest and Rangeland Renewable Resources Planning Act of 1974

The 1982 Planning Rule regulations at 219.12(f)(6) require land management plans to respond to and incorporate program objectives from the Renewable Resource Planning Act (RPA). The last RPA Program was developed in 1995. In lieu of the RPA Program, the Forest Service Strategic Plan 2007 to 2012 provides broad, overarching national guidance for forest planning and national objectives for the Agency as required by the Government Performance Results Act. All alternatives in this FEIS address these broad strategic objectives.

Inventoried Roadless Areas

Alternatives A, B, and D include management direction for inventoried roadless areas (IRAs) identified in the 2001 Roadless Area Conservation Rule (RACR) that retains the roadless character of these areas. In alternative C, these areas would be managed according to management area guidance with no direction to retain their roadless character.

During the plan revision process, there were two conflicting legal decisions concerning the status of IRAs. Because there was no resolution of the conflicting rulings at the time this analysis was initiated, the Forest Service included consideration of no IRAs and no IRA management in alternative C in response to public comments that requested full multiple-use of IRA lands. NEPA does allow the consideration of alternatives that may not be legal but address public concerns (40 CFR 1502.14(c)). During the analysis process, the Roadless Area Conservation Rule was upheld in federal court and alternative methods of IRA management, such as those considered in alternative C cannot be selected in the record of decision for the EIS.

Main Differences Among Alternatives

The alternatives differ in how they respond to the issues as identified in chapter 1 under the section “Issues that Served as the Basis for Alternative Development.” The alternatives also vary in the number of recommended research natural areas (RNAs). No issue drove the change in the number of recommended RNAs. The change was based on the theme of the alternative (for example, alternative D allocates some lands to recommended wilderness that could have been a recommended RNA).

See appendix J for management area maps of the alternatives.

Alternative A (1987 plan)

Under the no action alternative, the 1987 plan, as amended, would continue to guide management of the Apache-Sitgreaves NFs. Alternative A emphasizes timber management as a primary tool for providing forest products for local and regional industrial and individual needs while meeting wildlife habitat needs.

Priority for Restoration Treatments

Although not emphasized in the 1987 plan, current management emphasizes treatments around communities to reduce threats from wildfire and supply forest products through vegetation treatments, including the White Mountain Stewardship Project (a 10-year stewardship contract to thin primarily small diameter trees). Vegetation treatments have been implemented to restore forest health, reduce the risk of fire to communities, reduce the cost of forest thinning to taxpayers, support local economies, and encourage new wood product industries and uses for wood fiber. At least 20 percent of each forested and woodland PNVT is managed for, or toward, old growth.

Treatment Methods

Alternative A uses both mechanical and wildland fire treatments for timber management and to reduce threats to communities from wildfire.

On average, approximately 17,000 acres per year would be treated in the forested PNVTs, primarily ponderosa pine. Very few grassland areas would be treated, averaging around 500 acres per year. Approximately 3,500 acres per year of piñon-juniper and Madrean pine-oak woodlands would be treated, primarily with fire. No specific treatments are planned to improve ecological conditions in riparian areas; they would be treated as opportunities arise. There is no planned treatment objective for interior chaparral since this PNVT currently meets desired conditions; however, treatments may occur only as opportunities arise.

Wildlife Quiet Areas

There are eight areas (totaling 45,506 acres) implemented under special closure orders that are managed as wildlife habitat or quiet areas. While not a 1987 plan management area, these areas implement plan direction to benefit wildlife habitat, soil, vegetation, water resources, and recreation (improved hunting opportunities). These wildlife quiet areas include Beaver Turkey Ridge, Hulsey Bench, Middle Mountain, Open Draw, St. Peters Dome, Upper Coyote, Willow Springs-Horse Trap, and Woolhouse.

Recreation Opportunities

A variety of recreation opportunities are provided, including motorized, nonmotorized, developed, and dispersed. Construction of new recreation facilities to meet growing demand is an emphasis.

Figure 2 displays the Recreation Opportunity Spectrum (ROS) classes for alternative A: primitive (P), semi-primitive nonmotorized (SPNM), semi-primitive motorized (SPM), roaded natural

(RN), roaded modified (RM), rural (R), and urban (U). ROS is a framework for identifying the types of outdoor recreation opportunities on the forests that are available to the public. The ROS classes are described in the "Glossary."

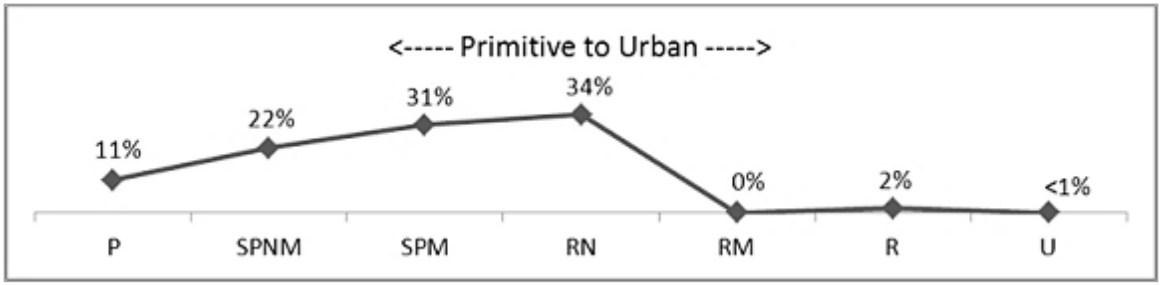

Figure 2. Recreation Opportunity Spectrum for alternative A

Recommended Wilderness

The 1987 plan does not recommend any additional lands for wilderness. In 1971, the Forest Service submitted a recommendation to the President of the United States for the Blue Range Wilderness in New Mexico and Arizona. Congress has not acted on the Arizona portion of this recommendation. Until Congress acts, the 1971 recommendation remains in place. The Blue Range Primitive Area and Additions Management Area is managed to protect wilderness values.

Contribution to Local Communities – Wood Product Availability

Alternative A has 764,872 acres of land managed for timber production on a regulated basis with planned, scheduled entries. It is estimated that an average of 205,000 CCF[6] of wood products, including sawlogs, biomass, and firewood, would be available annually for local and regional industry and individual use.

Research Natural Areas

The 1987 plan provides direction for one designated research natural area, Phelps Cabin RNA (approximately 290 acres). It recommends four new research natural areas totaling 2,569 acres: Escudilla, Thomas Creek, Wildcat, and Hayground. To date, these recommended areas have not been formally designated. In addition, there are approximately 100 acres managed as a botanical area, the Phelps Cabin Botanical Area.

Alternative B – Proposed Action (Preferred Alternative)

Alternative B is the proposed action (proposed plan) and the preferred alternative. This alternative was developed iteratively in a collaborative manner to address the need for change identified in chapter 1. It is designed to address the demands for wildlife habitat, community protection, commodity outputs, and recreation opportunities with an emphasis on ecological restoration.

[6] CCF = 100 cubic feet

Priority for Restoration Treatments

Treatments are focused in priority watersheds and locations identified in community wildfire protection plans, including the Community-Forest Intermix Management Area[7]. One of the main objectives of the proposed plan is to remove or mitigate degrading factors in at least 10 priority 6th level HUC (hydrologic unit code) watersheds within the next 10 to 15 years. Management emphasis is also to reduce the threat to communities from uncharacteristic wildfire.

The proposed plan emphasizes the retention and development of old growth where needed to meet desired conditions by including the guideline:

> "Where current forests are lacking proportional representation of late seral states and species composition on a landscape scale, old growth characteristics should be retained or encouraged to the greatest extent possible within the scope of other desired conditions (e.g., reduce impacts from insects and disease, reduce the threat of uncharacteristic wildfire)."

Treatment Methods

The proposed plan uses a mix of mechanical treatments and the reestablishment of natural processes, primarily wildland fire (both planned and unplanned ignitions), to maintain or move toward desired conditions of more resilient, healthy ecosystems.

Mechanical treatments would generally be followed by pile burning to remove residual fuels. As desired conditions are achieved, wildland fire or mechanical treatments may be used at regular intervals to maintain conditions. The proposed plan focuses restoration treatments in those PNVTs that are most divergent from desired conditions. There is an emphasis to treat forests, grasslands, and riparian areas; there is less emphasis on woodlands and chaparral.

The majority of treatments, from 5,000 to 35,000 acres per year, in the forested PNVTs would occur in ponderosa pine, although there would be treatments in all forested PNVTs. Additionally, up to 25,000 acres per year of grassland PNVTs (primarily Great Basin and semi-desert) would be treated to remove encroaching woody species. Approximately 5,000 to 15,000 acres per year of woodland PNVTs (primarily Madrean pine-oak using fire) and 200 to 500 acres per year of riparian areas would be treated to improve ecological conditions. There are no planned treatment objectives for interior chaparral since this PNVT currently meets desired conditions; however, treatments may occur as opportunities arise.

Wildlife Quiet Areas

In addition to the eight existing wildlife quiet areas (approximately 45,500 acres), this alternative adds two, Bear Springs and Cottonwood Seep, for a total of 50,173 acres. Unlike alternative A, all wildlife quiet areas in this alternative are assigned to a management area. Direction for these areas is found in the Wildlife Quiet Area Management Area.

[7] The Community-Forest Intermix Management Area makes up a portion of the wildland-urban interface (WUI). WUIs were identified in community wildfire protection plans (CWPPs) and may be located in several management areas. A WUI includes areas around human development at imminent risk from wildfire.

Recreation Opportunities

A variety and mix of recreation opportunities continue to be provided. New recreation developments are limited; the emphasis is on maintaining existing developments.

Figure 3 displays the Recreation Opportunity Spectrum (ROS) classes for alternative B: primitive (P), semi-primitive nonmotorized (SPNM), semi-primitive motorized (SPM), roaded natural (RN), roaded modified (RM), rural (R), and urban (U). ROS is a framework for identifying the types of outdoor recreation opportunities on the forests that are available to the public. The ROS classes are described in the "Glossary."

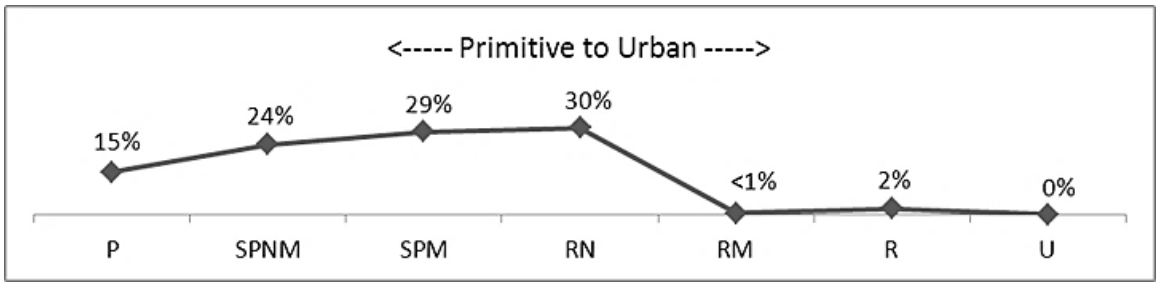

Figure 3. Recreation Opportunity Spectrum for alternative B

Recommended Wilderness

Alternative B recommends 7,074 acres for wilderness (figure 88 in appendix J). This includes additions to both Escudilla (6,813 acres) and Bear Wallow (261 acres) Wilderness areas. These preliminary administrative recommendations would receive further review, including applicable NEPA analyses, and possible modification by the Chief of the Forest Service, Secretary of Agriculture, and the President of the United States. Congress has reserved the authority to make final decisions on wilderness designation. These areas are managed to protect wilderness values. In this alternative, recommended wilderness is not suitable for mechanized travel (e.g., mountain bike use would not be allowed). The Blue Range Primitive Area continues to be managed as a primitive area until Congress acts on the 1971 wilderness recommendation.

Contribution to Local Communities – Wood Product Availability

The proposed plan identifies 596,744 acres of land to be managed for timber production on a regulated basis with planned, scheduled entries. Most commodities, such as sawlogs, biomass, and firewood, would be available as a result of restoration treatments. It is estimated that an average of 263,000 CCF of wood products would be available annually for local and regional industry and individual use as a byproduct of restoration treatments.

Research Natural Areas

The proposed plan carries forward the designated research natural area, Phelps Cabin RNA (approximately 290 acres) and recommends adding the Phelps Cabin Botanical Area (approximately 100 acres) to it as a recommended RNA. In addition, this alternative recommends designating five new research natural areas totaling 7,814 acres: Thomas Creek, Corduroy, Three Forks, Lower Campbell Blue, and Sandrock. Thomas Creek is currently managed as a

recommended RNA under the 1987 plan. This alternative would withdraw existing RNA recommendations for Escudilla Mountain, Wildcat, and Hayground.

Alternative C

Alternative C responds to public comments that forest management should provide increased benefits to local communities through management emphasis on commodity outputs and motorized and developed recreation. There is an emphasis on contributing to local and regional economic sustainability through ecological restoration.

Priority for Restoration Treatments

Alternative C focuses treatments in the Community-Forest Intermix Management Area, forests suitable for timber production, woodlands, and those grasslands encroached by woody species. There is an emphasis on reducing the threat to communities from uncharacteristic wildfire and on tree removal to contribute to commercial uses.

To provide additional opportunities to meet forest products desired conditions, alternative C does not include the following guideline that appears in the proposed plan (alternative B).

> "Where current forests are lacking proportional representation of late seral states and species composition on a landscape scale, old growth characteristics should be retained or encouraged to the greatest extent possible within the scope of other desired conditions (e.g., reduce impacts from insects and disease, reduce the threat of uncharacteristic wildfire)."

Treatment Methods

Alternative C primarily uses mechanical treatment methods, with less wildland fire than alternative B, to maintain or move toward desired conditions of more resilient, healthy ecosystems. Mechanical treatments would generally be followed by pile burning to remove residual fuels. As desired conditions are achieved, wildland fire or mechanical treatments may be used at regular intervals to maintain conditions. Restoration treatments are focused in forests, woodlands, and encroached montane/subalpine grasslands where there are commercial uses for trees removed. There is less emphasis to treat other grasslands, riparian areas, and chaparral.

The majority of treatments, from 5,500 to 55,000 acres per year, in the forested PNVTs would occur in ponderosa pine, although there would be treatments in all forested PNVTs. In addition, approximately 2,500 to 10,000 acres per year of woodland PNVTs would be treated using mainly mechanical treatments in piñon-juniper and fire in Madrean pine-oak. About 500 acres per year of montane/subalpine grasslands PNVT would be treated to remove encroaching woody species. No treatment acres are planned in riparian areas; they would be treated as opportunities arise. There are no planned treatment objectives for interior chaparral since this PNVT currently meets desired conditions; however, treatments may occur as opportunities arise.

Wildlife Quiet Areas

All eight existing wildlife quiet areas are carried forward in alternative C for a total of 44,373 acres, although Beaver Turkey Ridge and Willow Springs-Horse Trap would be slightly smaller due to the configuration of other management areas. Unlike alternative A, all wildlife

quite areas in this alternative are assigned to a management area. Direction for these areas is found in the Wildlife Quiet Area Management Area.

Recreation Opportunities

A variety of recreation opportunities continue to be provided with an emphasis on motorized and developed opportunities. New recreation facilities would be considered where there is a need to meet increasing demand.

Figure 4 displays the Recreation Opportunity Spectrum (ROS) classes for alternative C: primitive (P), semi-primitive nonmotorized (SPNM), semi-primitive motorized (SPM), roaded natural (RN), roaded modified (RM), rural (R), and urban (U). ROS is a framework for identifying the types of outdoor recreation opportunities on the forests that are available to the public. The ROS classes are described in the "Glossary."

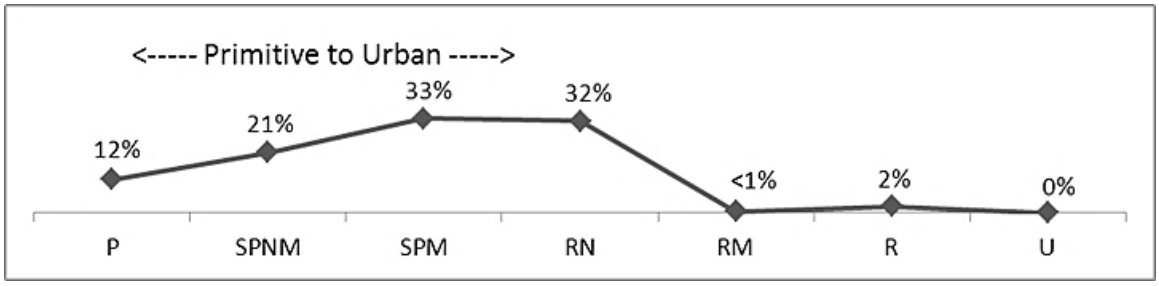

Figure 4. Recreation Opportunity Spectrum for alternative C

Recommended Wilderness

Alternative C recommends additions to Escudilla Wilderness totaling 6,982 acres (figure 90 in appendix J). This area is slightly larger than the alternative B addition to Escudilla Wilderness. These preliminary administrative recommendations would receive further review, including applicable NEPA analyses, and possible modification by the Chief of the Forest Service, Secretary of Agriculture, and the President of the United States. Congress has reserved the authority to make final decisions on wilderness designation. These areas are managed to protect wilderness values. In this alternative, recommended wilderness is not suitable for mechanized travel (e.g., mountain bike use would not be allowed). The Blue Range Primitive Area continues to be managed as a primitive area until Congress acts on the 1971 wilderness recommendation.

Contribution to Local Communities – Wood Product Availability

Alternative C identifies 604,746 acres of land to be managed for timber production on a regulated basis with planned, scheduled entries. Commodities such as sawlogs, biomass, and firewood would be available as a result of restoration treatments. It is estimated that an average of 416,000 CCF of wood products would be available annually for local and regional industry and individual use as a byproduct of restoration treatments.

Research Natural Areas

Alternative C carries forward the designated research natural area, Phelps Cabin RNA (approximately 290 acres), and recommends adding the Phelps Cabin Botanical Area (approximately 100 acres) to it as a recommended RNA. In addition, this alternative recommends designating five new research natural areas: Thomas Creek, Corduroy, Three Forks, Lower Campbell Blue, and Sandrock totaling 7,814 acres. Thomas Creek is currently managed as a recommended RNA under the 1987 plan. This alternative would withdraw existing RNA recommendations for Escudilla Mountain, Wildcat, and Hayground.

Alternative D

Alternative D responds to public comments that forest management should emphasize more natural processes and nonmotorized and dispersed recreation opportunities. There is an emphasis on ecological restoration in all PNVTs.

Priority for Restoration Treatments

Treatments are focused in priority watersheds. One of the primary objectives of alternative D is to remove or mitigate degrading factors in at least 10 priority 6th level HUC watersheds within the next 10 to 15 years.

This alternative emphasizes the retention of old growth and large trees. It includes the following standard for forested and woodland PNVTs in all management areas, except the Community-Forest Intermix Management Area:

> "Retain all large and old trees regardless of size or condition."

In the forested PNVTs, large trees are generally 16 inches in diameter or larger. In the woodland PNVTs, large trees are considered to be generally 20 inches in diameter or larger. Trees are considered to be old if they predate Euro-American settlement (middle to late 1800s).

Treatment Methods

Alternative D emphasizes natural processes, primarily wildland fire (planned and unplanned ignitions), with limited mechanical treatments to maintain or move toward the desired conditions of more resilient, healthy ecosystems. Where mechanical treatments are used, they generally would be followed by pile burning to remove residual fuels. As desired conditions are achieved, wildland fire would be the primary tool used at regular intervals to maintain conditions. Restoration treatments are distributed among all PNVTs in riparian areas, forests, grasslands, and woodlands.

Mechanical treatments would be used around communities in the Community-Forest Intermix Management Area and, in some cases, as pretreatment for prescribed fire. The majority of treatments, from 7,500 to 50,000 acres per year, in the forested PNVTs would occur in ponderosa pine, although there would be emphasis to treat all forested PNVTs. Additionally, up to 24,000 acres per year of grassland PNVTs would be treated to remove encroaching woody species in all grassland types. Approximately 5,000 to 30,000 acres per year of woodland PNVTs (primarily Madrean pine-oak using fire) and 300 to 600 acres per year of riparian areas would be treated to improve ecological conditions. There are no planned treatment objectives for interior

chaparral since this PNVT currently meets desired conditions; however, treatments may occur as opportunities arise.

Wildlife Quiet Areas

Alternative D includes seven of the eight existing wildlife quiet areas (minus Hulsey Bench) plus five more, Bear Springs, Cottonwood Seep, Carr Lake, Palomino, and Hidden Lake, for a total of 58,379 acres. Unlike alternative A, all wildlife quite areas in this alternative are assigned to a management area. Direction for these areas is found in the Wildlife Quiet Area Management Area.

Recreation Opportunities

A variety of recreation opportunities continue to be provided, with an emphasis on dispersed and nonmotorized opportunities. There is no emphasis on building new highly developed recreation facilities; however, recreation development that provides for dispersed recreation (e.g., trailheads, wildlife viewing areas, trails) may occur.

Figure 5 displays the Recreation Opportunity Spectrum (ROS) classes for alternative D: primitive (P), semi-primitive nonmotorized (SPNM), semi-primitive motorized (SPM), roaded natural (RN), roaded modified (RM), rural (R), and urban (U). ROS is a framework for identifying the types of outdoor recreation opportunities on the forests that are available to the public. The ROS classes are described in the "Glossary."

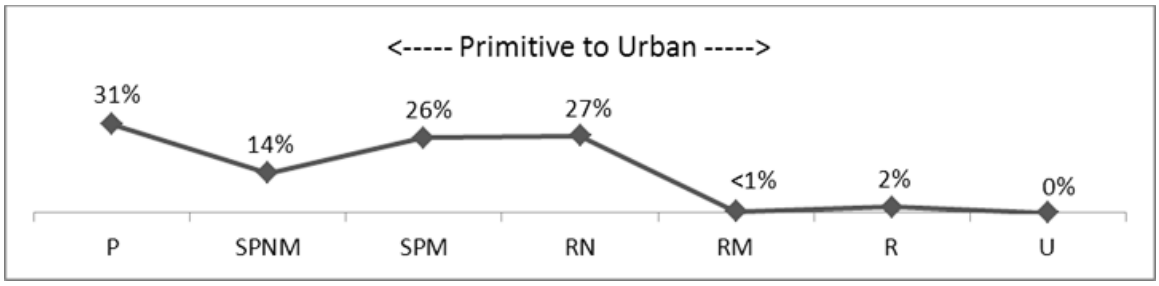

Figure 5. Recreation Opportunity Spectrum for alternative D

Recommended Wilderness

Alternative D recommends a total of 688,170 acres for wilderness (figures 91 and 92 in appendix J) on the Apache-Sitgreaves NFs. This includes 23 new stand-alone areas; 10 additions to Escudilla, Bear Wallow, and Mount Baldy Wilderness areas; and 2 additions to the Blue Range Primitive Area (484,714 acres)[8]. It also recommends almost all of the Blue Range Primitive Area and presidential additions (196,868 acres) for wilderness.

The alternative D recommendation includes three areas (Leonard Canyon, Centerfire, and West Blue/San Francisco) that extend onto other national forests. Small portions of these areas overlap the Coconino (2,981 acres) and Gila (3,607 acres) NFs; these 6,588 acres are included in the above total. These areas are recommended under the Apache-Sitgreaves NFs' plan because most

[8] Acreages were misprinted in DEIS and are correct here. All analyis in chapter 3 was done with these corrected acreages.

of the recommended acres are administered by the Apache-Sitgreaves NFs and the forests led the wilderness evaluation process. For more details, see the "Wilderness Resources" section in chapter 3.

These preliminary administrative recommendations would receive further review, including applicable NEPA analyses, and possible modification by the Chief of the Forest Service, Secretary of Agriculture, and the President of the United States. Congress has reserved the authority to make final decisions on wilderness designation. These areas are managed to protect wilderness values. In this alternative, recommended wilderness is suitable for mechanized travel (e.g., mountain bike use would be allowed). The Blue Range Primitive Area continues to be managed as a primitive area until Congress acts on the 1971 wilderness recommendation or this new recommendation.

Contribution to Local Communities – Wood Product Availability

Alternative D contains no land managed for timber production on a regulated basis. However, it is estimated that an average of 118,000 CCF of wood products including sawlogs, biomass, and firewood would be available annually for local and regional industrial and individual needs as a byproduct of restoration treatments.

Research Natural Areas

Alternative D carries forward the designated research natural area, Phelps Cabin RNA (approximately 290 acres), and recommends adding the Phelps Cabin Botanical Area (approximately 100 acres) to it as a recommended RNA. In addition, this alternative recommends designating two new research natural areas: Corduroy and Three Forks totaling 5,957 acres. This alternative would withdraw existing RNA recommendations for Escudilla Mountain, Wildcat, Hayground, and Thomas Creek.

Elements Common to All Action Alternatives

The three action alternatives (alternatives B, C, and D) have the following 13 areas of similarity:

1. Management Areas

A management area is used to allocate land for a unique emphasis. All action alternatives use the same basic set of 12 management areas (alternative A uses a set of 17 management areas). The alternatives differ in the total acreages and locations of the management areas.

Descriptions of the management areas considered in the action alternatives can be found in appendix D. Appendix D also includes descriptions of the management areas found in alternative A (1987 plan). Maps of the management areas can be found in appendix J.

2. Suitability

The criteria for the suitability of various uses (e.g., livestock grazing, timber production) are the same in all action alternatives. However, when the criteria are applied to the different alternatives, there may be variations in the amount of land suitable for certain uses (e.g., if an alternative has more land in the Natural Landscape Management Area, there could be less

land suitable for timber production). The suitability criteria can be found in chapter 4 of the proposed plan.

3. Standards and Guidelines

The action alternatives share the same standards and guidelines (i.e., constraints on project-level decisions). Where they do not, the differences are highlighted in the above alternative descriptions. The standards and guidelines can be found in chapters 2 and 3 of the proposed plan.

4. Monitoring Strategy

All action alternatives include the same monitoring strategy as identified in chapter 5 of the proposed plan.

5. Wildlife and Fish

The action alternatives provide fish and wildlife habitat to help maintain species' populations of existing native and desirable nonnative species. They further contribute to species' needs by providing wildlife quiet areas and other management areas with limited disturbance (e.g., designated and recommended wilderness, natural landscape, designated and recommended research natural area). The amount (acres) of these areas varies by alternative.

6. Invasive Species

Each action alternative provides direction to control, treat, or eradicate invasive plant and animal species.

7. Other Special Areas

The action alternatives provide management direction for those existing special areas not mentioned in the 1987 plan (e.g., Heber Wild Horse Territory, scenic byways, national recreation trails). They also include direction for the 25 eligible or suitable wild and scenic rivers.

8. Motorized Cross-Country Travel

The action alternatives limit motorized travel to a system of NFS roads and NFS trails[9]. They do not allow motorized cross-country travel, except where allowed by a written authorization (e.g., permit, right-of-way) issued under Federal law or regulation or in designated motorized areas. The action alternatives do not designate motorized areas nor do they make changes to the current system of NFS roads or NFS trails. Any new designated motorized cross-country areas or changes to roads or trails would be evaluated in a separate NEPA decision.

Alternative A does allow motorized cross-country travel[10].

[9] As identified in the I-WEB database (2012c), there are approximately 2,900 miles of roads and trails open for public or administrative use.

[10] Since alternative A allows motorized cross-country travel, if the responsible official selects alternative A, upon completion of the separate travel management planning process, the plan would be amended to limit motorized travel to designated roads, trails, and areas.

The proposed plan provides the framework to guide future changes to the transportation system. Once the final decision on the proposed plan has been made, potential changes to the forests' transportation system will be evaluated under the plan's framework and through implementation of the Travel Management Rule (36 CFR § 212)[11]. Upon completion of travel management planning, the associated motor vehicle use map (MVUM) will be printed. The MVUM will display the roads, trails, and areas that are designated for motorized vehicle use. Use inconsistent with those designations and inconsistent with this plan would be prohibited.

9. Threat to Communities from Wildfire

The action alternatives include the Community-Forest Intermix Management Area (1/2 mile buffer around communities at risk) to denote where fuels reduction treatments and maintenance are emphasized.

10. Landscape Scale Disturbance Events

The action alternatives include direction to be used following landscape scale (greater than 10,000 acres) disturbance events. These alternatives include standards and guidelines to protect existing resources and facilitate recovery of soil and vegetation components and improve ecosystem health.

11. Livestock Grazing

The action alternatives provide similar guidance for managing livestock grazing. The management focus is to "balance livestock grazing with available forage" on suitable grazing lands. The criteria for the suitability of livestock grazing are the same in all action alternatives. The amount of land suitable for livestock grazing would vary slightly among the action alternatives based on the number of recommended RNAs.

12. Urban Interface Demands

The action alternatives provide similar guidance (e.g., standards, guidelines) for addressing urban interface demands and land ownership adjustments.

13. New Energy Development

The action alternatives provide similar guidance (e.g., standards, guidelines, suitability criteria) for the existing energy corridors and for establishing new energy corridors or developments. The acres of land suitable for consideration of new energy developments vary among the action alternatives.

Comparison of Alternatives

This section provides a comparison of alternatives. The information focuses on activities and environmental consequences where differences among alternatives can be distinguished

[11] The Travel Management Rule was created to help address unmanaged motorized vehicle use. It requires each national forest to designate a system of roads, trails, and areas open to motor vehicles where OHVs and other motor vehicles can be used. Once the system is designated, the rule will prohibit motor vehicle use off the designated system.

quantitatively or qualitatively. It includes a comparison of management area allocations, indicators[12], and other information.

It should be noted that acreages and mileages listed in the FEIS are approximate. They were calculated using the most current data available in the Apache-Sitgreaves NFs' Geographic Information System (GIS). As the GIS database is updated, these measurements may change.

Comparison of Management Areas

Tables 1 and 2 identify the acreage and percentage of each management area that make up each alternative. Descriptions of the management areas can be found in appendix D. Note that alternative A (1987 plan) uses a different set of management areas than the action alternatives; a crosswalk comparison can be found in appendix D.

Table 1. Management area allocation (acres and percent) for the no action alternative

Management Area[a]	Acres[b]
Forest Land	865,473 (43%)
Woodland	766,495 (38%)
Grasslands	52,409 (3%)
Riparian	42,645 (2%)
Water	4,071 (<1%)
Escudilla Demonstration Area	4,898 (<1%)
Sandrock	26,596 (1%)
Research Natural Area	2,549 (<1%)
Developed Recreation Sites	(<1%)[c]
Black River	6,804 (<1%)
Chevelon Canyon	10,643 (1%)
West Fork Black River	9,066 (<1%)
East and West Forks Little Colorado River	1,927 (<1%)
Blue Range Primitive Area	199,505 (10%)
Bear Wallow Wilderness	11,234 (1%)
Escudilla Wilderness	4,195 (<1%)[d]
Mount Baldy Wilderness	6,842 (<1%)
Total acres	2,015,352

[a]See appendix D for descriptions of management areas.

[b]Acres are derived from the most current data available in the Apache-Sitgreaves NFs GIS database; they may differ from the amount stated in the 1987 plan due to mapping techniques and changes in land ownerships.

[c] Developed recreation sites management area was not discretely mapped.

[d] Escudilla Wilderness does not reflect acreage of Escudilla Mountain RNA

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[12] Indicators are quantitative or qualitative measures used to describe differences between alternatives.

Table 2. Management area allocation (acres and percent) for the action alternatives

Management Area[a]	Alt. B	Alt. C	Alt. D
General Forest	1,224,071 (61%)	1,599,357 (79%)	1,068,718 (53%)
Community-Forest Intermix	60,564 (3%)	60,564 (3%)	58,610 (3%)[b]
High Use Developed Recreation Area	16,549 (1%)	16,549 (1%)	16,549 (1%)
Energy Corridor	2,547 (<1%)	2,547 (<1%)	2,550 (<1%)[c]
Wild Horse Territory[d]	18,761 (1%)	18,761 (1%)	18,761 (1%)
Wildlife Quiet Area	50,173 (2%)	44,373 (2%)	59,379 (3%)
Natural Landscape	404,802 (20%)	35,408 (2%)	77,119 (4%)
Recommended Research Natural Area	7,814 (<1%)	7,814 (<1%)	5,957 (<1%)
Research Natural Area	261 (<1%)	261 (<1%)	261 (<1%)
Primitive Area[e]	199,502 (10%)	199,502 (10%)	199,502 (10%)[f]
Recommended Wilderness	7,074 (<1%)	6,982 (<1%)	484,712 (24%)
Wilderness	23,234 (1%)	23,234 (1%)	23,234 (1%)
Total acres	2,015,352	2,015,352	2,015,352

[a] See appendix D for descriptions of management areas.

[b] A portion of the land allocated to the Community-Forest Intermix Management Area in other alternatives is recommended for wilderness in alternative D.

[c] The Energy Corridor Management Area acreage for alternative D is slightly greater than alternatives B and C because three small isolated parcels containing a road could not be included in the adjacent Recommended Wilderness Management Area.

[d] The Wild Horse Territory, as designated by Congress, is approximately 19,700 acres; the difference in management area acres is due to the overlapping Community-Forest Intermix Management Area.

[e] In 1971, the Forest Service submitted a recommendation to the President of the United States for the Blue Range Wilderness in New Mexico and Arizona. The President forwarded the recommendation to Congress, who eventually acted on a portion of the recommendation. In 1980, Congress designated, and the President signed into law, the Blue Range Wilderness in New Mexico. The Arizona portion of the presidential recommendation (166,591 acres) included 20,031 acres outside and along the west primitive area boundary. The Forest Service and presidential recommendations for the Blue Range Wilderness in Arizona have not been acted upon.

[f] The majority of this area, except the road corridor, is also recommended for wilderness.

Comparison by Indicators

This section compares indicators of the need for change and issues for the four alternatives. Unless otherwise noted, the timeframe is the planning period and the outcomes are based on the average level of treatments identified in each alternative's objectives. Table values are approximations.

Table 3. Comparison of indicators by alternative

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Type, priority, and amount of restoration treatments				
Primary methods of restoration treatments	A mix of mechanical and wildland fire	A mix of mechanical and wildland fire	Primarily mechanical, some wildland fire	Primarily wildland fire, some mechanical
Priority[b] (emphasis) for restoration treatments	-Treat areas around communities to reduce the threat from uncharacteristic wildfire. -Provide wood products for the White Mountain Stewardship Project. -Old growth characteristics are retained and/or encouraged.	-Treat priority 6th level HUC watersheds. -Treat areas identified in community wildfire protection plans (CWPPs), including the Community-Forest Intermix Management Area to reduce the threat from uncharacteristic wildfire. -Wood products are available as a result of restoration treatments. -Old growth characteristics are retained and encouraged.	-Treat the Community-Forest Intermix Management Area to reduce the threat from uncharacteristic wildfire. -Treat lands suitable for timber production plus other forests, woodlands, and grasslands that can supply wood products. -Does not contain guidance to retain and encourage old growth characteristics.	-Treat priority 6th level HUC watersheds. - Treat the Community Forest Intermix Management Area to reduce the threat from uncharacteristic wildfire. -Wood products are available as a result of restoration treatments. -All large and old trees are retained, except in the Community-Forest Intermix Management Area.
Number of priority 6th level HUC watersheds where condition class is improved by removing or mitigating degrading factors	Opportunity[c]	10 per planning period		

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Amount of treatments to enhance or restore priority 6th level HUC watersheds	Opportunity	350 acres per year	350 acres per year	350 acres per year
Amount of treatments in forests (ponderosa pine, dry mixed conifer, wet mixed conifer, and spruce-fir)	17,000 acres per year primarily in ponderosa pine	5,000 to 35,000 acres per year primarily in ponderosa pine	5,500 to 55,000 acres per year primarily in ponderosa pine	7,500 to 50,000 acres per year primarily in ponderosa pine
Amount of treatments in woodlands (Madrean pine-oak and piñon-juniper)	3,500 acres per year in both types primarily using wildland fire	5,000 to 15,000 acres per year primarily in Madrean pine-oak using wildland fire	2,500 to 10,000 acres per year primarily mechanical in piñon-juniper and wildland fire in Madrean pine-oak	5,000 to 30,000 acres per year primarily in Madrean pine-oak using wildland fire
Amount of treatments in grasslands (semi-desert, Great Basin, and montane/subalpine)	500 acres per year	Up to 25,000 acres per year primarily in Great Basin and semi-desert	500 acres per year in montane/subalpine Other grasslands as opportunities arise	Up to 24,000 acres per year throughout all grassland types
Amount of treatments in interior chaparral	Opportunity	Opportunity	Opportunity	Opportunity
Amount of treatments in riparian areas to move toward desired composition, structure, and function	Opportunity	200 to 500 acres per year	Opportunity	300 to 600 acres per year
Minimum amount of NFS roads or trails that negatively impact streams or riparian areas to be relocated, repaired, improved, or decommissioned	Opportunity	4 miles per planning period	Opportunity	4 miles per planning period
Average amount of unauthorized roads or trails that negatively impact streams or riparian areas to be removed	Opportunity	2 miles per year	3 miles per year	3 miles per year
Amount of wet meadows or cienegas restored	Opportunity	5 to 25 per planning period	Opportunity	5 to 25 per planning period
Amount of stream and riparian habitat treatments to restore structure, composition, and function of physical habitat for native fisheries and riparian-dependent species	Less than 10 miles per year	5 to 15 miles per year	Opportunity	5 to 15 miles per year

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Average amount of riparian habitat treated to reduce animal damage to native willows and other riparian species	Opportunity	5 miles per year	5 miles per year	5 miles per year
Minimum number of projects to provide for aquatic and riparian-associated species and migratory species	Opportunity	5 per planning period	Opportunity	5 per planning period
Amount of treatments to contain, control, or eradicate terrestrial invasive species	500 acres per year	500 to 3,500 acres per year	500 to 3,500 acres per year	500 to 3,500 acres per year
Minimum amount of treatments to contain, control, or eradicate aquatic invasive species	Opportunity	2 miles per year	2 miles per year	2 miles per year
Minimum number of unneeded structures removed to improve wildlife connectivity	Opportunity	5 per year	5 per year	5 per year
Average number of dispersed campsites rehabilitated, stabilized, revegetated, or relocated	Opportunity	5 per year	5 per year	5 per year
Departure rating from desired conditions by PNVT, based on the average treatment objectives	**(see the "Vegetation" section in chapter 3)**			
Ponderosa pine forest	High	High	Moderate	High
Dry mixed conifer forest	Moderate	Moderate	Moderate	High
Wet mixed conifer forest	Moderate	Moderate	Moderate	Moderate
Spruce-fir forest	High	High	High	High
Piñon-juniper woodland	Low	No Departure	No Departure	No Departure
Madrean pine-oak woodland	Moderate	Moderate	Moderate	Moderate
Great Basin grassland	High	No	High	No
Semi-desert grassland	Severe	High	Severe	High

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Benefit to maintenance and reproduction of aspen	**(see the "Vegetation" section in chapter 3)**			
Amount of aspen on the landscape (desired condition is at least 50,000 acres)	71,100 acres	68,200 acres	65,800 acres	65,500 acres
Trend of riparian conditions and function toward proper functioning condition	**(see the "Riparian" section in chapter 3)**			
Trend of riparian condition and function	Away	Toward	Away	Toward
Percent of grasslands where encroachment of woody canopy is reduced to less than 10 percent	**(see the "Vegetation" section in chapter 3)**			
Amount of Great Basin and semi-desert grasslands where woody species encroachment is reduced	1%	46%	1%	42%
Probability of nuisance smoke impacts to communities	**(see the "Fire" section in chapter 3)**			
Probability of short-term smoke impacts from wildland fire (planned and unplanned ignitions)	Least	High	Moderate	Highest
Probability of long-term smoke impacts from uncharacteristic wildfires	Highest	Moderate	High	Least
Number and acres of wildlife quiet areas	**(see the "Wildlife and Rare Plants" section in chapter 3)**			
Number of wildlife quiet areas	8 areas	10 areas	8 areas	12 areas
Amount of wildlife quiet areas	45,500 acres	50,200 acres	44,400 acres	59,400 acres

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Acres and percent of the Apache-Sitgreaves NFs by Recreation Opportunity Spectrum (ROS) classification	**(see the "Recreation" section in chapter 3)**			
Primitive (P)	228,954 acres (11%)	295,934 acres (15%)	232,233 acres (12%)	620,879 acres (31%)
Semiprimitive Nonmotorized (SPNM)	452,486 acres (22%)	487,747 acres (24%)	422,932 acres (21%)	279,050 acres (14%)
Semiprimitive Motorized (SPM)	614,520 acres (31%)	575,572 acres (29%)	662,116 acres (33%)	527,725 acres (26%)
Roaded Natural (RN)	686,435 acres (34%)	603,887 acres (30%)	645,056 acres (32%)	539,491 acres (27%)
Roaded Modified (RM)	0 acres (0%)	9,682 acres (<1%)	9,682 acres (<1%)	7,149 acres (<1%)
Rural (R)	32,853 acres (2%)	42,530 acres (2%)	43,333 acres (2%)	41,058 acres (2%)
Urban (U)	104 acres (<1%)	0 acres (0%)	0 acres (0%)	0 acres (0%)
Acres and percent of the Apache-Sitgreaves NFs designated wilderness, primitive area, and recommended for wilderness	**(see the "Wilderness Resources" section in chapter 3)**			
Amount of designated wilderness	23,234 acres[d] (1%)	23,234 acres[d] (1%)	23,234 acres[d] (1%)	23,234 acres[d] (1%)
Amount of primitive area[e]	199,505 acres (10%)	199,502 acres (10%)	199,502 acres (10%)	199,502 acres (10%)
Amount of recommended wilderness	0 acres (0%)	7,074 acres (0.4%)	6,982 acres (0.3%)	484,712 acres[f] (24%)

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Additional areas recommended for wilderness[g]	0 acres (0%)	0 acres (0%)	0 acres (0%)	196,868 acres[h] (10%)
Number and acres of designated and recommended research natural areas (RNAs)	**(see the "Research Natural Area section in chapter 3)**			
Number of designated RNAs	1	1	1	1
Number of recommended RNAs	4	6	6	3
Amount of designated and recommended RNAs (percent of NFS land)	2,549 acres (<1%)	8,075 acres (<1%)	8,075 acres (<1%)	6,218 acres (<1%)
Acres and percent of the Apache-Sitgreaves NFs by Scenic Integrity Level (SIL)	**(see the "Scenic Resources" section in chapter 3)**			
Very high scenic integrity (unaltered)	210,769 acres (11%)	305,047 acres (15%)	303,723 acres (15%)	748,716 acres (37%)
High scenic integrity (appears unaltered)	490,464 acres (25%)	786,776 acres (39%)	676,394 acres (34%)	444,302 acres (22%)
Moderate scenic integrity (slightly altered)	835,979 acres (42%)	920,648 acres (46%)	1,032,351 acres (51%)	819,449 acres (41%)
Low scenic integrity (moderately altered)	405,470 acres (20%)	394 acres (<1%)	394 acres (<1%)	393 acres (<1%)
Very low scenic integrity (heavily altered)	35,008 acres (2%)	2,490 acres (<1%)	2,490 acres (<1%)	2,492 acres (<1%)
Economic contributions of forest management	**(see the "Socioeconomic Resources" section in chapter 3)**			
Average labor income generated	$117,600,000	$118,400,00	$129,300,000	$112,400,000
Average number of jobs contributed	3,768	3,793	4,120	3,610
Average present net value	-$26,800,000	-$26,400,000	-$17,000,000	-$28,200,000

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Acres and percent of Apache-Sitgreaves NFs that are suitable for timber production	**(see the "Forest Products" section in chapter 3)**			
Amount of land suitable for timber production on a regulated basis	764,900 acres (38.0%)	596,700 acres (29.6%)	604,700 acres (30.0%)	0 acres (0%)
Annual average amount of sawtimber, pulp, and poles (5 inch or greater diameter)	**(see the "Forest Products" section in chapter 3)**			
Average amount of sawtimber, pulp, and poles (5 inch or greater diameter)	80,000 CCF	84,000 CCF	171,000 CCF	27,000 CCF
Annual average amount of firewood available	**(see the "Forest Products" section in chapter 3)**			
Average amount of firewood available	26,000 CCF	75,000 CCF	35,000 CCF	46,000 CCF
Annual average amount (tons) of biomass available	**(see the "Forest Products" section in chapter 3)**			
Average amount of biomass available	348,000 tons	364,000 tons	733,000 tons	156,000 tons
Acres and percent of Apache-Sitgreaves NFs suitable for new energy corridors or development	**(see the "Lands and Special Uses" section in chapter 3)**			
Amount of land suitable for new energy corridors or development	NA (NA)	889,700 acres (44%)	1,007,500 acres (50%)	784,400 acres (39%)

[a] Alternative A, the no action alternative, has a different set of management areas than the action alternatives; a crosswalk, found in appendix D, was used so the alternatives could be compared.

[b] The priority or emphasis of where treatments would occur varies by alternative.

[c] Opportunity indicates that there would be no set objective for this alternative; treatments and accomplishments would occur as opportunities arise and conditions, funding, and staffing allow.

[d] Alternative A acres include the Escudilla Wilderness Management Area and a part of the Research Natural Area Management Area (Escudilla Mountain RNA) that is within the designated wilderness.

[e] Acres in the primitive area differ between alterantive A and the action alternatives due to improved mapping techniques (i.e., mapping from the 1987 plan map compared to mapping with aerial photography as reference).

[f] Alternative D also recommends 2,981 acres on the Coconino NF and 3,607 acres on the Gila NF.

[g] There is a 1971 presidential wilderness recommendation of the Blue Range Primitive Area and additions that Congress has not acted upon. The Blue Range Primitive Area must be managed as a primitive area until Congress acts on the 1971 wilderness recommendation.

[h] Alternative D would recommend the majority of the Primitive Area Management Area, except the road corridor, for wilderness designation.

Comparison of Other Plan Objectives

This section compares other plan objectives for the four alternatives.

Table 4. Other plan objectives

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Minimum number of new wildlife viewing opportunities created	Opportunity	10 per	planning	period
Provision of accessible and wildlife-resistant trash facilities in all developed sites where trash is collected	Opportunity	Within	planning	period
Percent of developed recreation deferred maintenance backlog reduced	Opportunity	10% per	planning	period
Percent of NFS roads maintained		20% of passenger high-clearance	vehicle roads vehicle roads	and 10% of per year
Percent of NFS motorized trails maintained			20% per year	
Percent of NFS nonmotorized trails maintained			20% per year	
Removal of the National Recreation Trail designation from the Escudilla trail to conform with agency policy	Initiate	process within 5	years of plan	approval
Average number of projects accomplished to enhance scenic resources	Opportunity		5 per year	
Average number of miles of NFS boundary surveyed and posted	Opportunity		2 to 5 miles per year	
Average number of miles of NFS property boundary posted and corner monuments placed	Opportunity		2 to 5 miles per year	
Average number of existing trespass cases resolved	Opportunity		3 per year	
Schedule for inspecting National Register sites and priority cultural resources	Opportunity	Every 2 years or Region Heritage	according to SW Program	
Minimum number of eligible cultural resources nominated to the National Register of Historic Places	Opportunity	At least 5 per	planning	period
Number of Passport in Time (PIT) or other education projects that provide opportunities for the public to learn about the past and cultural resources	Opportunity		1 per year	
Minimum amount of non-project cultural inventory completed	Opportunity	100 acres	per planning	period

Indicator	Alt. A[a]	Alt. B	Alt. C	Alt. D
Minimum number of MOUs renewed or established with culturally affiliated tribes	Opportunity	5 per	planning	period
Average number of Christmas tree permits provided	5,000 per year			
Minimum number of instream flow water rights applications prepared	Opportunity	One per year		

[a] Alternative A, the no action alternative, has a different set of management areas than the action alternatives; a crosswalk, found in appendix D, was used so that the alternatives could be compared.