USDA United States Department of Agriculture
Forest Service
Southwestern Region
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File Code: 1900
Date: May 23, 2023

Dear Objectors and Interested Persons:

As the objection reviewing officer for the Tonto National Forest Land Management Plan revision, I am providing my final written response to the objections filed on the draft record of decision (ROD), revised land management plan, and final environmental impact statement (36 CFR 219.50, Subpart B). My response is the final determination of the U.S. Department of Agriculture on the objections (36 CFR 219.57(b)(3)) and concludes this administrative review.

The legal notice of the objection period for the draft ROD and revised forest plan was published on July 8, 2022, initiating a 60-day objection filing period. I received 14 eligible objections and 14 requests from interested persons. I held a virtual objection resolution meeting with objectors and interested persons on February 21 and 22, 2023. The meeting focused on seven topic areas, including watershed and riparian areas, range, minerals, recreation, wilderness and recommended wilderness, wild and scenic rivers, and wildlife. The feedback I received at the meeting improved my understanding of the issues and suggested remedies.

Consistent with the planning rule (36 CFR 219.57(b)(1)), I have consolidated issues and responses by resource area. My response includes an assessment of issues, a conclusion of findings, and instructions for the forest to complete before signing the final ROD. My response is attached and is also available on the forest plan revision website at https://www.fs.usda.gov/main/tonto/landmanagement/planning, along with notes from the objection resolution meeting. Additional information about the objection process is in the introduction of the response document.

The species of conservation concern objection issue was reviewed by the Chief of the Forest Service's delegated representative, Associate Deputy Chief Jaqueline Emanuel, and is also posted on the website referenced above.

The objection process allowed the reviewing officer, Forest Supervisor Neil Bosworth as the responsible official, objectors, and interested persons the opportunity to collaboratively address issues prior to the revised forest plan's final ROD. Many of you have participated during the process and I appreciate your engagement to improve the plan. Please contact Ariel Leonard, Southwestern Region Regional Planner, at ariel.leonard@usda.gov with questions regarding this objection response.

Sincerely,

Digitally signed by MICHIKO MARTIN
Date: 2023.05.24 07:43:47 -06'00'

MICHIKO J. MARTIN
Regional Forester

Enclosure

cc: Ariel Leonard; Neil Bosworth

Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Southwestern Region May 2023

Objection Response for the Tonto National Forest Plan Revision

For more information about this objection response, please contact:

Ariel Leonard, Southwestern Region Regional Planner

Ariel.leonard@usda.gov

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INTRODUCTION

Land Management Planning Process

As required by the National Forest Management Act (NFMA) and guided by the Code of Federal Regulations (CFR) at 36 CFR Part 219, Forest Service Manual (FSM) 1900, chapter 1920, and Forest Service Handbook (FSH) 1909.12, National Forest System (NFS) land management units are required to develop and maintain land management plans for the management of National Forest System lands, and those which depend upon them. These plans are known as “forest plans” or “grassland plans."

Land management planning is a science-informed process which aims to ensure ecological and economic sustainability, maintenance or restoration of federally listed species and their critical habitat, and provide sustainable multiple uses, all within the inherent capability of the plan area, and the fiscal capability of the unit. Planning can be summarized into four separate yet interconnected segments: assessment, plan development, pre-decisional administrative review (objection) process, and monitoring. All of these ensure integration of information, expertise, and public engagement. Plan development requires preparation of documents in compliance with the National Environmental Policy Act (NEPA) and the 2012 planning rule (36 CFR Part 219) to afford the public an opportunity to participate in the development of the land management plan and associated documents.

During the objection process, the public can raise objections to specific aspects of planning documents. The reviewing officer reviews the objections and proposed remedies and provides a response to objectors, which may include instructions to the responsible official to modify aspects of the planning documents. Once instructions are completed, the responsible official publishes the final plan, environmental impact statement (EIS), and record of decision (ROD). The final plan will be effective 30 days after the date of publication in the Federal Register.

36 CFR 219.62 defines an objector as “An individual or entity that meets the requirements of § 36 CFR 219.53, and files an objection that meets the requirements of [36 CFR] 219.54 and [36 CFR] 219.56.” Interested persons are individuals or organizations that provided substantive formal comments on the plan and filed a formal interested persons request during the designated time period (36 CFR 219.56 and FSH 1909.12, chapter 50, section 51.65).

Tonto Plan Objections

There were 14 eligible objections and 14 interested persons requests for the plan revision.

Objectors

- Access Fund
- Arizona Game and Fish Department
- Arizona Game and Fish Department Commission
- Arizona Mining Association
- Arizona Sportsmen for Wildlife Conservation
- Arizona State Association of 4 Wheel Drive Clubs
- Freeport-McMoRan
- Greg Warren
- Jeffrey Burgess
- Northern Arizona Climbers Coalition
- Pinto Valley Mining Corporation
- Salt River Project

- Sierra Club et al. - Grand Canyon Chapter, Western Watersheds, Arizona Mining Reform Coalition, and WildEarth Guardians
- Tonto Recreation Alliance

Interested Persons

- American Whitewater
- Arizona Mining Association
- Arizona Sportsmen for Wildlife Conservation
- Center for Biological Diversity
- Gila County
- Samuel Foreman
- Ken Meadors
- Erik Murdock
- Northern Arizona Climbers Coalition
- Pinto Valley Mining Corporation
- Barbara Sachau (Jean Public)
- Sierra Club et al. (Sierra Club- Grand Canyon Chapter, Western Watersheds, Arizona Mining Reform Coalition, and WildEarth Guardians)
- Wilderness Watch

Resolution Meeting

A resolution meeting was held on February 21-22, 2023 (per 36 CFR 219.57(a)), via Microsoft Teams, which included a phone line for those without internet access. A list of meeting attendees is included in the meeting notes, available on the forest's planning website at https://www.fs.usda.gov/main/tonto/landmanagement/planning. A select set of issues that the reviewing officer wanted more information on were identified for the meeting. Objectors and interested persons were given the opportunities to speak on topics of interest.

Objection Response Reading Guide

The following responses to the objections are organized into topic areas, such as recreation or wildlife. Individual issues are addressed in the following format: name of the issue; objection summary, which includes the name of the objector(s); an assessment of the issue; a conclusion of findings based on the assessment; and any instructions to the forest which must be completed before signing the ROD. Where applicable, similar issues have been combined into one response, while preserving the context of the individual issues.

For ease of discussion throughout this document, the Tonto National Forest will be referred to as "the forest." The Tonto National Forest Land Management Plan will be referred to as "the plan" or "the land management plan" depending on the context of the discussion.

All page numbers and plan components cited refer to the 2022 final plan, final EIS, and associated appendices. Because adjustments may be made to the EIS and plan, earlier versions shared publicly prior to the objection period are not "final" and therefore page numbers may have changed. The final plan set of documents will be made public with notification in the Federal Register.

A list of references cited is provided at the end of this document, organized by topic areas. A link to commonly cited references, such as CFRs and forest plan revision documents, is provided under the *General* sub-heading.

PLANNING

New Plan Components

Objection Summary

Freeport-McMoRan is concerned with not having an opportunity to comment on RMZ-S-03, RMZ-G-01, RMZ-G-07, RMZ-MA-07, LRMA-G-05, LRMA-G-06, and SRHMA-S-03 because they were added to the plan between the draft and final versions.

Objector's Proposed Remedy

Remove RMZ-S-03, RMZ-G-01, RMZ-G-07, RMZ-MA-07, LRMA-G-05, LRMA-G-06, and SRHMA-S-03 from the plan.

Assessment

The plan content referenced by the objector includes:

- *RMZ-S-03: Projects within the riparian management zone that use herbicides or pesticides will establish application buffer areas based on project objectives, the size of the project area, characteristics of the chemicals to be used, and application methods.*
- *RMZ-G-01: New spring developments and redeveloped springs (not including maintenance) should employ the strategies outlined in RMRS-GTR 405[74] or the best available science associated with spring development (USDA Forest Service 2020).*
  [74]RMRS-GTR 405 is the 2020 Forest Service General Technical Report "Rangeland Water Developments at Springs: Best Practices for Design, Rehabilitation, and Restoration."
- *RMZ-G-07: Project planning and activities affecting riparian and aquatic ecosystems should consider the desired conditions specified in the current Regional Riparian and Aquatic Ecosystem Strategy (USDA Forest Service 2019).*
- *RMZ-MA-07: Consider both active and passive restoration techniques[76] to improve riparian conditions and encourage self-sustaining ecosystems.*
  [76]Active restoration is where management actions (e.g., planting vegetation or bank stabilization or other physical actions) are taken to restore ecological conditions whereas passive restoration focuses on ceasing environmental stressors (e.g., reducing pressure from multiple uses to allow the system to recover on its own.
- *LRMA-G-05: Permitted livestock grazing should not be authorized in the Lakes and Rivers Management Area except where existing infrastructure or natural boundaries prevent livestock from accessing the rivers and lakes.*
- *LRMA-G-06: Permitted livestock should not be authorized to cross the Verde River except where necessary and authorized in allotment management plans.*
- *SRHMA-S-03: Permitted livestock grazing shall not be authorized within the Salt River Horse Management Area.*

40 CFR 1503.4 states that an agency preparing a final EIS shall consider substantive comments and may respond by modifying alternatives, including the proposed action; developing and evaluating alternatives not previously given serious consideration; supplementing, improving, or modifying its analyses; making factual corrections; and explaining why the comments do not warrant agency response.

Changes to a proposed action may occur between a draft and final EIS. Changes are most often made in response to and as a logical outgrowth of comments received on the draft EIS. If changes to the proposed action or new circumstances or information relevant to environmental concerns is not significant, the agency need not prepare a supplement (40 CFR 1502.9(d)(4)).

RMZ-S-03, LRMA-G-05, LRMA-G-06, SRHMA-S-03, and ERU-MA-05 were added between draft and final versions of the plan. The planning record did not clearly demonstrate rationale for these additions.

RMZ-G-01 was modified between draft and final to better reflect and communicate how the forest manages these important spring ecosystems with specific reference to Gurrieri 2020 (final EIS, volume 3, p. 244, comment 2970-483).

Conclusion

I find the planning record adequately provides rationale for changes to RMZ-G-01. However, the record does not include the rationale for changes to RMZ-S-03, LRMA-G-05, LRMA-G-06, SRHMA-S-03, and ERU-MA-05.

Instructions

Document the rationale for changes to RMZ-S-03, LRMA-G-05, LRMA-G-06, and SRHMA-S-03 in the planning record. Documentation should include the reason for the change (e.g., new circumstances, new information, response to public comments) and should state whether the changes, new circumstances, or new information relevant to environmental concerns is or is not significant.

Suitability Determination

Objection Summary

Freeport-McMoRan contends that the information provided on page 13 of the plan about determining suitability of lands for different uses and management activities is "overly broad and leads to an application of a standard and process that is arbitrary, capricious, burdensome, and costly.” Further, the objector alleges this is inconsistent with regulations.

Objector’s Proposed Remedy

Remove the following from page 13 of the plan:

> *Identifying suitability of lands for a use in the plan indicates that the use may be appropriate but does not make a specific commitment to authorize that use. Final suitability determinations for specific authorizations occur at the project or activity-level decision-making process. Generally, the lands on the national forest are suitable for all uses and management activities appropriate for national forests unless identified as not suitable.*

Assessment

Forests are required by the planning rule to develop plan components for the suitability of lands in order to identify which areas of the planning unit are suitable or not suitable for a particular use (36 CFR 219.7(e)(1)(v)).

The draft plan described suitability of lands as:

> *…specific lands within a plan area that are suitable for various uses or activities based on the desired conditions applicable to those lands. The land management plan also identifies lands within the planning area as not suitable for uses that are not compatible with desired conditions for those lands. The suitability of lands need not be identified for every use or activity; however, every plan must identify those lands that are not suitable for timber production.*

The forest added the following verbiage to the final plan:

> *Identifying suitability of lands for a use in the plan indicates that the use may be appropriate but does not make a specific commitment to authorize that use. Final suitability determinations for specific authorizations occur at the project-or activity-level decision-making process. Generally, the lands on the national forest are suitable for all uses and management activities appropriate for national forests unless identified as not suitable.*

The added language clarifies that while the plan may identify certain lands as suitable or not suitable for certain uses, with the aim of meeting the desired conditions of the plan, the plan itself does not authorize any projects or activities (36 CFR 219.2 (b)(2)). As such, a suitability determination in the plan does not make a site-specific determination or decision for any project or activity. Project or activity-specific determinations will be made at the project level.

Conclusion

I find that the added statements are consistent with the requirements of the planning rule (36 CFR 219.7(e)(1)(v)) and provides clarity as it pertains to suitability of lands.

Instructions

None.

Adaptive Management

Objection Summary

Sierra Club et al. allege that the revised land management plan relies on adaptive management, but it does not contain key elements required to comply with Forest Service regulations, in violation of NEPA. They believe the monitoring strategy does not contain a clear framework nor measurable thresholds to adequately inform decisions. They are also concerned that the forest does not have the resources to complete the monitoring and the use of the “Reading the Range” program. The objectors acknowledge that while the forest can further expand on the strategy later and that this may be helpful to respond to changing conditions, the current approach still does not meet the requirements of the law and will not be effective.

Objectors’ Proposed Remedies

Update the final EIS to include an adaptive management plan that meets legal, regulatory, and scientific requirements. Specifically:

- The plan must "clearly identify what that changed management will entail and disclose in the NEPA document the impacts caused by that change in management" once thresholds are met.
- Complete pre-and post-restoration assessments

- Describe what changed management or actions the Forest Service will take (beyond doing more of the same) if restoration goals succeed or fail.
- Disclose what ecological outcomes would determine project success and fails to describe what thresholds or triggers would initiate a changed course of action.
- Define thresholds that influence a subsequent decision.
- Identify measurable triggers that, if exceeded as determined by monitoring, will require a change in management.
- Describe the nature or impacts of project adjustments.

Assessment

Adaptive management is the general framework encompassing the three phases of planning: assessment, plan development (i.e., revision or amendment), and monitoring (36 CFR 219.5). In essence, the planning process is itself an adaptive management strategy.

The 2012 preamble to the planning rule (p. 21194) states:

> *…the adaptive management framework of assessment, revision or amendment, and monitoring in this final rule provides a scientifically supported process for decision making in the face of uncertainty and particularly under changing conditions. The intent of this framework is to create a responsive planning process and allows the Forest Service to adapt to changing conditions and improve management based on new information. Monitoring provides the feedback for the planning cycle by testing assumptions, tracking relevant conditions over time, and measuring management effectiveness.*

The forest initiated the plan revision process in 2014. After collaboration with the public, tribes, partner agencies, and other stakeholders, the forest released the forest plan assessment in 2017. A draft plan and draft EIS were released in 2019 and the final land management plan, final EIS, and draft ROD were released in 2022.

Chapter 4 of the plan includes a monitoring program that is designed to test assumptions, track relevant conditions over time, measure management effectiveness, and evaluate the effects of management practices. The monitoring questions in chapter 4 address each of the eight required monitoring categories (36 CFR 219.12(a)(4)) and are linked to desired conditions, objectives, standards, or guidelines. The draft ROD (p. 21) states that a biennial monitoring evaluation report will be prepared to indicate whether a change to the land management plan, management activities, or monitoring plan may be needed—or whether a new assessment may be warranted, based on new information.

Conclusion

I find the plan revision process and revised plan are consistent with the requirements of the planning rule. The forest prepared an assessment (36 CFR 219.6); revised the land management plan (36 CFR 219.7); and prepared a monitoring plan (36 CFR 219.12). These three phases of planning provide the framework for an adaptive management strategy.

Instructions

- Update the ROD on page 47 to cite chapter 4 instead of chapter 5: “Land management plan monitoring program is an integral part of this adaptive management cycle, consisting of

monitoring questions and indicators (see chapter 5 of the plan for additional information about the monitoring plan)."

- Update the plan and ROD to use either "adaptive management principles" (e.g., p. 59) or "adaptive management strategies" (e.g., p. 102) consistently.
- Remove adaptive management language from alternative B in the ROD, plan, and EIS. All alternatives should allow for adaptive management, not just alternative B.

Authority and Fiscal Capability

Objection Summary

Freeport-McMoRan claims that the responsible official failed to demonstrate how the inherent capability of the plan area and the fiscal capability of the unit were considered as restraints on the plan components.

Objector's Proposed Remedy

None provided.

Assessment

Per the planning rule, "the responsible official shall ensure that the planning process, plan components, and other plan content are within Forest Service authority, the inherent capability of the plan area, and the fiscal capability of the unit" (36 CFR 219.1(g)).

Page 10 of the 2017 forest plan assessment outlines what "ecosystem sustainability" means within the context of the land management plan, and land management planning in general. Throughout the assessment (pp. 2, 10, and 12), the forest outlines key characteristics of the planning area, as well as stressors, threats, and needs of these ecosystems. The final plan also discusses "ecosystem sustainability" (pp. 1, 6, 9, and 10) and the need and requirements of land management plans to address and provide ecosystem integrity.

The plan uses the term "economic sustainability" in its demonstration of providing fiscal capability of the unit. For example, page 1 of the plan states that, "This plan provides the vision, strategy, and constraints that guide integrated resource management, provide for ecological sustainability, and contribute to social and economic sustainability on the forest and within the broader landscape. The introduction in the "Distinctive Roles and Contributions" section (pp. 5-6) summarizes how multiple aspects of the plan provide economic benefits (e.g., firewood; designated wilderness; wild and scenic rivers, hunting, fishing, and wildlife viewing; range). The "Social, Cultural, and Economic Sustainability" section (pp. 10-11) notes that "There is a need for desired conditions that recognize the Tonto's role in contributing to local economies through multiple-use related activities and products (e.g., recreation, tourism, timber, and grazing)."

Two desired conditions in the plan point to providing economic sustainability:

- *SC-DC-05: Scenery is managed for present and future generations, is resilient to changing conditions, and supports ecological, social, and economic sustainability on the forest and in surrounding communities.*

- *RD-DC-01: The Forest's transportation system and infrastructure accommodate needs for public access, land management, resource protection, and user safety, while contributing to social and economic sustainability.*

Economic sustainability is also included in the monitoring plan as monitoring topic 9 to monitor the plan's contributions to meeting economic sustainability via monitoring questions, such as:

- *Monitoring question 11: Is the national forest providing a sustainable, predictable level of forest products to communities?*
- *Monitoring question 19: Are rangelands providing adequate forage for livestock to sustain traditional lifestyles, socioeconomic diversity, and cultural identity of local communities?*
- *Monitoring question 23: What is the contribution of volunteer and partnership work towards meeting plan objectives and moving towards desired conditions?*

The analysis in the final EIS (volume 1) also demonstrates consideration of fiscal capability and economics, such as in the energy production and delivery analysis (pp. 140-142); socioeconomics analysis (pp. 181-215); forestry and forest products analysis (pp. 216-237); mining, minerals, and abandoned mines (pp. 247-253); roads analysis (pp. 254-261); and facilities analysis (pp. 262-267).

In outlining the various alternatives and their effects within the final EIS, the responsible official identified the level of resources the forest has at their disposal, and where volunteers and partnerships are needed to assist in work (final EIS, volume 1, pp. 64-66). The final EIS acknowledges that "given the agency's constraints on personnel, funding, and other resources…relationships are extremely valuable for multiple resource areas throughout the forest including soils, wildlife, recreation, fire, watersheds, and even business administration" (final EIS, volume 1, p. 64). The level of funds and resources helped shape these alternatives. Lastly, the draft ROD documents that the responsible official's determination that the plan contributes to economic sustainability (pp. 10-20).

Conclusion

I find that the responsible official addressed the various needs of the planning area to provide for ecosystem sustainability and integrity, the inherent capability of the plan area, and the fiscal capability of the forest.

Instructions

None.

Past Authorization and Compliance

Objection Summary

Pinto Valley Mining Corporation is concerned that past authorizations will be required to be consistent with the new plan.

Objector's Proposed Remedy

Add "authorizations of occupancy and use made before this forest plan revision ROD may proceed unchanged" to the last sentence of the first paragraph under the "Plan Implementation" section and as

the first sentence under the heading "Project Consistency" in the ROD on pages 46 and 47, and into the plan on pages 17 and 19.

Assessment

36 CFR 219.15(a) states:

> *Every decision document approving a plan, plan amendment, or plan revision must state whether authorizations of occupancy and use made before the decision document may proceed unchanged. If a plan decision document does not expressly allow such occupancy and use, the permit, contract, and other authorizing instrument for the use and occupancy must be made consistent with the plan, plan amendment, or plan revision as soon as practicable, as provided in paragraph (d) of this section, subject to valid existing rights.*

The ROD on page 46 reflects this direction:

> *As required by NFMA and the planning rule, subject to valid existing rights, all projects and activities authorized by the Forest Service after approval of this plan must be consistent with the applicable plan components (16 USC 1604(i)) as described at 36 CFR 219.15. Previously approved and ongoing projects and activities are not required to meet the direction of the land management plan and will remain consistent with the direction in the 1985 forest plan, as amended.*

The ROD on page 47 further explains that:

> *Authorizations for occupancy and use made before this plan approval may proceed unchanged until time of reauthorization. At time of reauthorization, all permits, contracts, and other authorizing instruments must be made consistent with the land management plan, subject to existing valid rights, as provided at §219.15(d).*

Page 19 of the plan also states:

> *The plan is used as a direction source for future projects, plans, and assessments. It is not expected that this new direction be used to reevaluate or change decisions that have been made under the previous plan. A smooth and gradual transition to the new plan is anticipated, rather than one that forces an immediate reexamination or modification of all contracts, projects, permits, and other activities that are already in progress. As new project decisions, contracts, permits, renewals, and other activities are considered, conformance with the new plan direction as described in the previous section is expected.*

Conclusion

I find that the plan and ROD adequately explain that the direction in the plan is applicable to all future projects and activities and that previously approved and ongoing projects are not required to meet direction in the plan and will remain consistent with the direction in the 1985 forest plan, as amended.

Further, the plan and ROD adequately explain that authorizations for occupancy and use made before approval of the revised forest may proceed unchanged until time of reauthorization and at the time of reauthorization, all permits, contracts, and other authorizing instruments must be made consistent with the plan, subject to valid existing rights.

Instructions

None.

Amendments and Administrative Changes

Objection Summary

Greg Warren reminds the Forest Service that the National Forest Management Act requires all projects to be consistent with the land management plan but does not require past decisions and ongoing projects to be in compliance with the new revised plan. Mr. Warren states that resource plans such as travel management must comply with the new revised plan and that new projects must be consistent with the new plan or must be amended. The objector is concerned that the plan alludes to allowing plan components and where plan components may apply be changed with administrative changes in the future, instead of with a plan amendment, in violation of 36 CFR 219.7(e) and 36 CFR 219.17(b)(2).

Objector's Proposed Remedy

Revise the plan and ROD to indicate that recreation opportunity spectrum and scenery related maps may only be changed with a plan amendment.

Assessment

The objector is correct that a plan amendment is required to add, modify, or remove one or more plan components, or to change how or where one or more plan components apply to all or part of the plan area, as outlined in 36 CFR 219.13(a). The level, or severity of change, is not the standard by which the approach is measured, but rather only if a plan component would change or where a plan component applies would change. Administrative changes are reserved for changes that "include corrections of clerical errors to any part of the plan, conformance of the plan to new statutory or regulatory requirements, or changes to other content in the plan" (36 CFR 219.13(c)). For example, "clerical errors" may arise over time with updated geospatial data resulting in modifications to recreation opportunity spectrum and scenic integrity objective maps to reflect corrections to geospatial data.

Conclusion

I find that the forest is consistent with the requirements of the planning rule at 36 CFR 219.13. However, the ROD would benefit from clearly describing the difference between amendment and administrative change.

Instructions

Update the ROD to reflect the planning rule more closely as it relates to amendments and administrative changes. Clarify that plan amendments are available to change plan components, or where plan components apply, regardless of severity. Administrative changes include corrections of clerical errors to any part of the plan, conformance of the plan to new statuary or regulatory requirements, or changes to other content in the plan (36 CFR 219.7(f)).

Collaboration with Partners

Objection Summary

Arizona State Association of 4 Wheel Drive Clubs asserts that the forest did not sufficiently commit resources to their partnership program.

Objector's Proposed Remedy

Revise the plan to provide a "stronger commitment of resources, willingness to adjust processes and procedures plus organizational and/or cultural change where needed to capture the value of partners."

Assessment

Examples of plan content that demonstrate the forest's consideration of volunteers and partners include:

- *PV-DC-04: Shared responsibility, stewardship, and strong connections exists between the Tonto National Forest, our partners, and communities on projects leading to greater outcomes and benefits to forest users and the communities we serve.*
- *PV-MA-01: Work collaboratively with partners and volunteers on forest issues and enable them to take action to move projects forward when they can provide funding, volunteers, and other resources for environmental analysis or project implementation.*

Both the plan and the final EIS highlight the importance of partnerships and volunteerism, and the need for such collaboration to help meet the desired conditions set out by the forest. The draft ROD also highlighted this need, stating, "There is an emphasis on the need to build stronger relationships with elected officials, cities and counties, Federal and State agencies, Tribal governments, traditional and rural communities, recreational and forest user groups, environmental groups, youth, and vendors," (pp. 15-16).

This issue was previously raised during comments on the draft plan and draft EIS, and the forest addressed this concern in the response to comments (final EIS, volume 3, comment 2733-3):

> *Partnerships and volunteer efforts are very important on the Tonto National Forest and are outlined in the forest plan and in the Partnerships and Volunteer section in chapter 3 of the environmental impact statement. Management approaches do not offer plan direction and are not required components but describe a strategy to achieve a desired condition. Management approaches often convey how plan components work together to achieve the desired condition. The plan discusses the overall need to prioritize partners and volunteers in order to accomplish its mission. The ability to engage with partners and volunteers and provide resources will vary dependent on many factors within each district. These factors may include staffing, funding, timelines, clearance needs, etc. There is nothing in the plan that would restrict committing more resources to any partnership opportunities as these resources become available. However, there are also "national directives, authorities, and policies in place outside of the forest plan that help guide the commitment to partners and volunteers as well as prioritize interdependent projects." These include, but are not limited to, the National Forest Systems Trails Stewardship Act, Good Neighbor Authority, Volunteers in National Forest Act, Shared Stewardship Agreements, and various types of cooperative agreements. The Forest Service Partnership program "is guided by*

the Partnership Guide developed in conjunction with the National Forest Foundation as well as [FSM] 1580, [FSH] 1509.11, and Service First Authorities.

Conclusion

I find that the forest adequately considered volunteers and partners through plan development and that the plan is consistent with the requirements of the planning rule by incorporating plan direction for partnerships (plan, p. 22) and management approaches consistent with 36 CFR 219.7(f)(2).

Instructions

None.

Glossary Definitions

Objection Summary

Greg Warren contends that the glossary in volume 2 of the final EIS and the final plan should include expanded descriptions and definitions of the National Trails System Act; National Scenic Trail; National Scenic and Historic Trail nature and purposes; recreation opportunity spectrum; and scenic integrity.

Objector's Proposed Remedy

Include the expanded descriptions and definitions in the glossary of the plan and final EIS.

Assessment

Neither the planning rule (36 CFR Part 219) nor NEPA (40 CFR 1502.10[1]) require a glossary in the land management plan or EIS. However, a glossary is included in volume 2 of the final EIS. The terms identified by the objector are defined and/or described in the final EIS. The plan includes footnotes specific to several of the terms by the objector. Several of the footnotes include links to websites where additional information may be found.

Conclusion

I find the plan and final EIS adequately define these terms in compliance with applicable law, regulation, and policy. Since links to websites may change or become invalid over time, I would like the forest to verify the accuracy of all links provided at the time the ROD is signed.

Instructions

Verify all links in footnotes in the plan are accurate and navigate to the correct website.

[1] Note that all references to 40 CFR 1500 regulations (regulations for the Council on Environmental Quality regulations) refer to the 1978 version of the regulations, as they were current at the time the programmatic NEPA review was conducted.

TRIBAL AND TRADITIONAL USES

Tribal and Traditional Uses Language in the Plan

Objection Summary

Freeport-McMoRan expressed concern over what they consider tribal access, distinctive roles and contributions, and traditional use aspects of the plan that are too broad and burdensome to the mining industry. Specifically, they take issue with:

- The addition of “with an emphasis on restoration to pre-reservation conditions” to “Native American Tribes may also have an interest in natural, historical, cultural, and other resources of the Tonto National Forest, with an emphasis on restoration to pre-reservation conditions” (plan, p. 5).
- The replacement of “traditions” with “traditional land use” in “Management of the Tonto National Forest involves many distinct resources that are integrated with each other. In this chapter each resource is presented in an individual section with management direction and associated plan content (narratives and management approaches). Socioeconomic resources (e.g., timber (forest products), grazing, cultural resources and traditional land uses, and recreation) are presented in the first half of this chapter,” (plan, p. 21); and
- The addition of "access to and availability of" to TRB-G-02.

They also remind the forest that they did not have an opportunity to comment on these changes.

Objector’s Proposed Remedies

- Delete “Distinctive Roles and Contributions” from the fourth paragraph of page 5.
- Use “traditions” instead of “traditional land use” on the third paragraph of page 21.
- Return TRB-G-02 to the draft plan version: *Tribal traditional use of medicinal plants and other botanical resources should be considered when authorizing commercial harvesting and special uses.*

Assessment

The plan component referenced by the objector includes:

> *TRB-G-02: Tribal access to and availability of traditional medicinal plants and other botanical resources should be considered when authorizing commercial harvesting and special uses.*

Changes in language between draft and final versions of the plan are a normal, iterative part of the forest planning process (36 CFR 219.7(c)). The forest broadly explained these changes as a result of comments received, updates in best available scientific information, and internal review (final EIS, volume 1, p. 20). More specifically, some of these changes were made in response to discussions with tribes that occurred during a meeting in between the draft and final version of the plan.

Below, the specific changes the objector takes issue with are identified, followed by an explanation of findings.

Change 1: The addition of "with an emphasis on restoration to pre-reservation conditions" on page 5 of the plan.

The *Distinctive Roles and Contributions* section is defined as "other plan content," and is meant as context to describe the unit's unique capabilities (FSH 1909.12, chapter 20, section 22.32). This addition describes the interest of Native American tribes but does not guarantee them any legal rights to restore specific National Forest System lands to "pre-reservation conditions." This addition is not new management direction; it is background information that does not require project consistency and does not delineate tasks (FSH 1909.12, chapter 20, section 22.3; plan, p. 19). It is not expected to result in a change to management.

Change 2: The replacement of "traditions" with "traditional land use" on page 21 of the plan.

The introductory paragraphs in the *Forest wide Plan Direction* chapter of the plan are not required plan content (FSH 1909.12, chapter 20, section 22.3); they provide background contextual information, identifying that one of many uses of the forest is traditional land use. Listing "traditional land uses" as one possible use does not require that specific land or all land on the forest be managed for traditional land uses. This modification is not new management direction; it is background information that does not require project consistency and does not delineate tasks (FSH 1909.12, chapter 20, section 22.3; plan, p. 19). It is not expected to result in a change to management.

Change 3: The addition of "access to and availability of" to TRB-G-02.

The addition of "access to and availability of" to TRB-G-02 do not result in a change to management as the guideline states that tribal access to and availability of these resources be considered, not that they supersede or negate other management activities.

Conclusion

I find that none of the changes between the draft and final EIS are expected to result in changes to forest management or analysis. Applicability of plan content is still subject to valid existing rights and all applicable laws and regulations.

Instructions

None.

CULTURAL AND HISTORIC RESOURCES

Cultural Resources

Objection Summary

Freeport-McMoRan takes issue with the difference in definitions of "cultural resources" between the plan, the final EIS, and FSM 2300, chapter 2360, section 2360.5. Their main concern is that "cultural resources" is not defined in the manual, yet the forest is citing a definition in their glossary. They ask that definitions be consistent with regulations.

They were also concerned that page 44 of the *Cultural and Historic Resources (CUH)* section of the plan now includes mining and mineral related activities that can impact the resource. The objectors feel this is unnecessary because mining is already heavily regulated through permits.

In addition, they took issue with CUH-DC-07 and CUH-DC-08 because they consider these desired conditions as overly burdensome and costly.

Objector's Proposed Remedies

- Use one definition of "cultural resources" in the plan.
- Remove "mining and mineral related activities" from the fourth paragraph of page 44 to return the sentence to wording provided in the draft plan.
- Delete CUH-DC-07 and 08.

Assessment

The plan components referenced by the objector includes:

- *CUH-DC-07: Cultural resources (including artifacts) are preserved in place.*
- *CUH-DC -08: The forest has been inventoried for cultural properties at a level that meets current professional standards.*

The plan (p. 44) defines cultural resources, using FSM 2300, chapter 2360, section 2360.5, as a reference:

> *An object or definite location of human activity, occupation, or use identifiable through field survey, historical documentation, or oral evidence. Cultural resources are prehistoric, historic, archaeological, or architectural sites, structures, places, or objects and traditional cultural properties. In this chapter, cultural resources include the entire spectrum of resources for which the Heritage Program is responsible from artifacts to cultural landscapes without regard to eligibility for listing on the National Register of Historic Places.*

Volume 2 of the final EIS defines "cultural resources" as "The remains of sites, structures, or objects used by humans in the past, historic or prehistoric. More recently referred to as heritage resources," (p. 263). While the final EIS uses a shorter definition than the manual, it is not uncommon for definitions to be abbreviated. The abbreviated definition in this case is not expected to result in any changes in analysis or management compared to the definition in the manual. As is the case with many resource subject areas, other technical and legal sources may also use slightly different language to define "cultural resources." However, for the sake of consistency, the forest should update its definition in the final EIS to match the manual.

The addition of "mining and mineral related activities" provides background and contextual information. It is not a plan component; therefore, project consistency is not required (plan, p. 19; FSH 1909.12, chapter 20, section 22.4). This addition will not result in additional regulation or restrictions and is not expected to affect management.

Desired conditions are aspirational and do not set forth a timeline or guidance on how to achieve the desired conditions (FSH 1909.12, chapter 20, section 22.11). They do not constitute new regulation or legal requirements. Further, the planning rule directs that land management plans do not affect valid existing rights established by statute or legal instrument (36 CFR 219.1(d)), such as any rights established under existing mining laws (e.g., General Mining Act of 1872; Mineral Leasing Act of 1920; Surface Use Act of 1955; Mining and Mineral Policy of 1970).

CUH-G-02 (*When cultural resources cannot be preserved in place, artifacts and records should be curated following current professional standards*) emphasizes what is already a required cultural resource management process. This guideline provides space for when CUH-DC-07 may not be fully achievable. CUH-DC-08 is a desired condition; it does not require that it must be achieved by a certain date. No new regulations or restrictions, or the creation of overly burdensome and costly activities, are expected based the addition of CUH-DC-07 and CUH-DC-08.

Conclusion

I find that the inclusion of CUH-DC-07 and CUH-DC-08 would not result in changes to management, restrictions, or expectations on the mining industry. However, while no management impacts or changes to analysis are anticipated based on the inconsistent definitions of "cultural resources", it would be best practice for the plan and final EIS to have consistent definitions that match policy.

Instructions

Update the final EIS definition to match FSM 2360.5's definition of "cultural resources", or add a reference to the manual's definition, if there is a desire to keep the definition brief.

ENVIRONMENTAL JUSTICE

Accessibility

Objection Summary

Arizona State Association of 4 Wheel Drive Clubs reminds the forest of Executive Order 13985 and asserts that 36 CFR 218.8(c) requires the forest to incorporate new information into the plan and final EIS, pointing to the environmental justice mandate that requires fair treatment for all.

Objector's Proposed Remedy

Ensure the access needs of disabled users is considered in alternatives and ensure that people with disabilities who depend on motorized means do not lose access.

Assessment

The Forest Service is subject to several statutes related to accommodations for individuals with disabilities. Consistent with the Multiple-Use Sustained-Yield Act and the National Forest Management Act, the planning regulations direct the agency to provide a variety of recreational opportunities. The Multiple-Use Sustained-Yield Act does not require that every acre of National Forest System land be managed for every multiple use and does envision some lands being used for less than all the resources. The Forest Service manages recreation use to conserve and sustain National Forest System resources and provide a range of opportunities for both motorized and non-motorized uses in a manner that is ecologically sustainable over the long term. National Forest System lands are not reserved for the exclusive use of any one group, nor must every use be accommodated on every acre.

Notable citations from the planning record that demonstrate compliance with the applicable laws, regulations, and/or policies include the following:

- The final EIS (p. 211) identifies a higher proportion of persons with disabilities (all races and ethnicities) in Gila, Pinal, and Yavapai counties compared to Arizona as a whole, classifying persons with disabilities in those counties as environmental justice communities who are entitled to “systematic fair, just, and impartial treatment” (Executive Order 13985).
- Limitations to motor vehicle access would impact persons with disabilities, and though no alternatives directly remove motor vehicle access, alternative C has the greatest potential to limit access in the future through establishment of proposed wilderness (final EIS, volume 1, p. 179). However, the final EIS, volume 1 (pp. 201-202) states that restrictions on motor vehicle access are applied consistently to everyone are therefore not discriminatory under the Americans with Disabilities Act (29 USC 794) or Executive Order 13985. Allowing greater motor vehicle access for people with disabilities or any other group would not be consistent with the resource protection and other management objectives of travel management or the Forest Service's travel management program (29 USC 794; 7 CFR 15e.103).
- According to the forest’s travel management revised final EIS, volume 1 (p. 165) and consistent with 36 CFR 212.1, FSM 2353.05, and Title V, Section 507(c), of the Americans with Disabilities Act, “wheelchairs and mobility devices, including those that are battery-powered, that are designed solely for use by a mobility-impaired person for locomotion and that are suitable for use in an indoor pedestrian area, are allowed on all National Forest System lands that are open to foot travel.”

Conclusion

I find the effects from reducing access to motorized trails do not result in inequitable or discriminatory treatment for people with disabilities. The forest complied with law, regulation, and policy related to analysis of potential impacts from plan revision to people with disabilities.

Instructions

None.

RECREATION

Dispersed Recreation

Objection Summary

Arizona State Association of 4 Wheel Drive Clubs is concerned about the language in two dispersed recreation components, REC-DIS-G-06 and REC-DIS-MO-S-02, because they believe they are overly prescriptive; could limit trail building options; are not necessary to meet sustainable trail practices; and may be contrary to sustainable trail practices.

The association thinks the phrase "fall line trails should be avoided" should be removed from REC-DIS-G-06 because they contend that fall line trails may be more sustainable in some instances than non-fall line trails, such as a fall line on granite surface versus a machine-made non-fall line trail.

Objector's Proposed Remedies

- Remove "fall line trails should be avoided" from REC-DIS-G-06.
- Remove the examples from REC-DIS-MO-S-02.

Assessment and Conclusion

The plan components from the draft plan that were referenced by the objector includes:

- *REC-DIS-G-06: Design, construction, realignment and maintenance of motorized and non-motorized trails should be consistent with sustainable trail building guidelines, minimize adverse resource impacts (e.g., soil erosion, soil compaction, sedimentation in creeks, and damage to riparian habitats), minimize user conflict, and enhance the recreation experience. Fall-line[5] trails should be avoided.*

  [5]A "fall line" trail follows the line down a mountain or hill which is most directly downhill. Generally, it descends in the most downward direction, rather than traversing in a sideways direction.
- *REC-DIS-MO-S-02: Newly constructed motorized trails will follow current sustainable construction and design standards for motorized trail building principles (e.g., avoiding hilltops, ridges, riparian areas, and any route alignments with greater than 10% surface grade) to mitigate erosion and to promote sustainable design.*

I find that the phrase and examples in the objector's concern were not in the final plan. The language of concern was from the draft plan and was updated for the final based on comments received. Therefore, the objector's concerns have already been addressed.

Instructions

None.

Developed Recreation

Objection Summary

Arizona State Association of 4 Wheel Drive Clubs states that REC-G-03 is not consistent with page 21 of the plan, which "emphasizes the consideration and balancing of other factors (e.g., economic and social factors)."

Objector's Proposed Remedy

Change REC-G-03 to: *Recreation developments and improvements should be planned, designed, and managed for long-term sustainability considering all effects and benefits using the best available sustainable recreation practices.*

Assessment

The plan component referenced by the objector states:

> *REC-G-03: Recreation developments and improvements should be planned, designed, and managed for activities and capacities that minimize resource damage (e.g., soil erosion and vegetation trampling) and minimize adverse impacts to scenic character[9].*
>
> *[9]Information on and desired conditions for landscape character can be found in the scenery section.*

As discussed in the response to comments (final EIS, volume 3, p. 226, comment 2733-6), REC-G-03 does not negate the overall approach to implement sustainable recreation management, projects, or developments across the forest without full consideration of the three elements of sustainable recreation (ecological, economical, and socially sustainability) as captured in the recreation desired conditions, guidelines, and overall approach to recreation management on the forest. Per these plan components and descriptions, all recreation developments, improvements, or newly developed sites should move towards the desired conditions of the plan, desired recreation opportunity spectrum class, and serve as the purpose and need for any projects developed to support recreation opportunities.

As written, the guideline aligns with the planning rule and current Forest Service handbook direction for sustainable recreation. The language proposed in the objector's remedy is already incorporated into several other plan components (e.g., REC-DC-01, REC-G-10, REC-DIS-G-04, REC-DIS-MO-G-02) that would ensure consideration of recreation opportunities and other benefits.

- *REC-DC-01: Recreation contributes to enhanced quality of life for all of our visitors and the communities we serve. Recreation opportunities support healthy lifestyles and local businesses and jobs, contribute to vibrant local economies, and conserve water quality, at-risk species habitat, landscapes, and cultural resources.*
- *REC-G-10: Environmental programs, nature programs, and other guided services, are available locally to connect people with nature, teach new skills, provide challenge and adventure, and instill a lifetime appreciation for public lands and outdoor recreation. Opportunities are available for everyone regardless of socioeconomic status or individual ability.*
- *REC-DIS-G-04: National Forest System trails should not be used for management activities (e.g., fire, timber, and range management) that negatively impact trail management objectives, unless alternatives entail greater resource damage. Adverse impacts to trail features should be restored as part of project completion.*
- *REC-DIS-MO-G-02: Where new and existing designated trails encounter springs, trails should be designed and maintained to minimize negative impacts to the spring (e.g., erosion, trampling, compaction, and introduction of invasive species and disease) while still allowing access for wildlife.*

Conclusion

I find that the forest has met its obligations under the planning rule 36 CFR 219.10 (b)(1)(i)) and FSH 1909.12, chapter 20, section 23.23 for sustainable recreation regarding REC-G-03. As written, the guideline aligns with the planning rule and current FSH direction for sustainable recreation.

I find that the language proposed in the objector's remedy is incorporated into several other plan components that will ensure consideration of recreation opportunities and other benefits. In review of plan components for scenery (SC-G-01 through 03), REC-G-03 is partially duplicative of scenery guidelines which state: "Recreation developments and improvements should be planned, designed, and managed for activities and capacities ….and minimize adverse impacts to scenic character."

Instructions

None.

Recreation Opportunity Spectrum

Objection Summary

Greg Warren is concerned about the application of the recreation opportunity spectrum in planning, motorized game retrieval, and timber suitability in primitive and semi-primitive recreation opportunity spectrum classes. The objector contends that the response to comments includes incorrect information and an incorrect link in REC-G-10. Mr. Warren alleges violations with applicable laws, regulations, and policies, including Council on Environmental Quality NEPA requirements and United States Department of Agriculture Departmental Regulation 1074-0001 (USDA 2016).

Objector's Proposed Remedies

As it relates to recreation opportunity spectrum application and integration into plan development and analysis:

- Modify the land management plan and complete a supplemental EIS (specifically the recreation and scenery analyses), using the recreation opportunity spectrum planning framework, to be consistent with direction in the planning rule and directives, the *1986 ROS Book* (USDA 1986), the scenery management system, and the 2005 version of 40 CFR 1500-1508.
- Adopt the recreation opportunity spectrum class desired conditions, standards, guidelines, and suitability guidance as described in the objector's comments on the draft plan.
- Clarify in the ROD that glossary terms included as parts of plan components may not be changed through an administrative plan change.

As it relates to understanding how management activities and other uses may affect recreation settings and desired recreation opportunity spectrum settings:

- Discuss recreation setting conditions and trends.
- Identify contributing factors to a changing, dynamic environment that may influence the alternatives.
- Describe existing vegetation management practices and associated road construction in semi-primitive non-motorized and semi-primitive motorized recreation opportunity spectrum settings in the affected environment.
- Identify and describe (in narrative and with maps and publicly available geospatial data) areas with "extensive forest management activities, high road densities, heavily logged areas, extensive vegetation management, highly visible mining, oil and gas, or other similar uses and activities" as roaded modified recreation opportunity spectrum settings, instead of primitive and semi-primitive recreation opportunity spectrum settings.
- Disclose that "timber production, extensive vegetation management, mine development actions, and roads are incompatible with Primitive and Semi-Primitive recreation opportunity spectrum settings." Include plan components requiring that a road built in primitive or semi-primitive recreation opportunity spectrum settings be "decommissioned with full obliteration, recontouring, and restoring natural slopes" and require monitoring to "ensure that surface areas are stabilized and revegetated with native plants."

As it relates to understanding the application of travel management decisions within alternatives in relation to desired recreation opportunity spectrum settings:

- Identify the temporary and permanent road system in more primitive recreation opportunity spectrum settings and explain why roads are allowed in these recreation opportunity spectrum settings.
- Update the transportation analysis to:
    - Include a review of the miles of National Forest System roads and trails in each alternative; and
    - Analyze, in narrative and cross tabular formats with publicly available geospatial data, the following for each alternative:
        - Miles of projected permanent and temporary roads by recreation opportunity spectrum setting.
        - Miles of projected designated motorized use trails in semi-primitive non-motorized and semi-primitive motorized recreation opportunity spectrum settings identified as suitable for timber production.
        - Miles of projected designated motorized use trails by recreation opportunity spectrum setting.

Assessment

The plan component referenced by the objector includes:

> *REC-G-10: All project-level decisions, implementation activities, and management activities should be consistent with or move the area toward the appropriate recreation opportunity spectrum (ROS)[10,11], or current protocol.*
>
> *[10]Recreation opportunity spectrum can be found on the Tonto National Forest website under Recreation at: https://www.fs.usda.gov/detail/tonto/landmanagement/resourcemanagement/?cid=fsbdev3_018770.*
>
> *[11]Motorized use off of designated routes and areas as depicted in the Motor Vehicle Use Map is prohibited (36 CFR 261.13)*

The forest demonstrated compliance with the planning rule and FSM and FSH direction for the sustainable recreation framework by mapping existing and desired recreation opportunity spectrum classes across the forest and including plan components to ensure that management activities will be consistent with or move towards the desired recreation opportunity spectrum class. Additional incorporation by reference and planning record documentation would further clarify this compliance.

Alternative A and the current recreation opportunity spectrum is reflective of the travel management plan's analysis and ROD, which is appropriate given that it reflects current on the ground conditions of the forest's transportation system.

Conclusion

I find that the forest met the requirements of the planning rule (36 CFR 219.10(b)(1)(i)) and FSM and FSH direction for sustainable recreation (FSM 2300, chapter 2310, section 2310.3 and FSH 1909.12, chapter 20, section 23.23(a)). However, additional supporting documentation should be incorporated by reference and added to the planning record.

Instructions

- Update the plan revision website references to recreation opportunity spectrum and scenery management documentation to ensure they navigate to the correct locations.

- Add to the record and incorporate by reference:
    - The *National Recreation Opportunity Spectrum Mapping Protocol (Summer)* to support the development of existing and desired recreation opportunity spectrum classes across the forest and provide context to the recreation opportunity spectrum paper.
    - Documentation of interdisciplinary discussions and other supporting information on the development and differences between alternatives.

Rock Climbing

Objection Summary

Access Fund and the Northern Arizona Climbing Coalition object to REC-DIS-NMO-DC-04 and REC-DIS-NMO-G-04 regarding rock climbing. The objectors are concerned permanent climbing bolts and anchors will only be allowed on approved routes, but the plan does not provide direction on how a route can become approved, nor does it define "unauthorized" or "authorized" permanent climbing bolts and anchors, leaving REC-DIS-NMO-DC-04 open for misinterpretation. The objectors contend these two plan components will unnecessarily limit the growth of rock climbing and could also present safety concerns over time as bolts and anchors need replacing. Access Fund also opposes the use of "scenic integrity" in REC-DIS-NMO-G-04, because it is not defined and could limit public access.

Objectors' Proposed Remedies

- Access Fund and Northern Arizona Climbing Coalition: Grandfather in existing climbing and rappelling anchors and label them as "authorized."
- Access Fund: Remove "scenic integrity" from REC-DIS-NMO-G-04.

Assessment

Plan components referenced by the objectors include:

- *REC-DIS-NMO-DC-04: Unauthorized permanent fixed anchors for rock climbing and rappelling are not present on the landscape or natural features.*
- *REC-DIS-NMO-G-04: Permanent fixed anchors or bolts for rock climbing and rappelling should be allowed where resource conflicts do not exist (e.g., at-risk species, scenic integrity, cultural resources) and removable protection[16] is not practicable for safe ascent or descent for approved routes.*

    [16]*Removable protection is defined as removable anchors and other temporary equipment.*

The definition of "unauthorized" is being used to identify any permanent bolts or anchors used for climbing as there is no process to 'authorize' installation. There is no national or regional process to authorize routes or permanent anchors and the term, "written authorization" was removed from the final plan.

Existing fixed anchors and bolts cannot be grandfathered, as authorized, because there is no complete list of this type of infrastructure on the forest. Per the document, *20201022 RockClimbingChangesforFinal LMP*, existing fixed anchors and bolts are unauthorized because they are not permitted and environmental analysis was not completed.

The plan does not contain direction on how to obtain route approval as this would be addressed at the program level, rather than the forest plan revision level. However, the plan includes management

approaches for the forest to collaborate with climbing organizations and develop a climbing management plan that will provide direction for approving routes:

- *REC-DIS-NMO-MA-04 Collaborate with established local and national climbing, caving, and canyoneering organizations to monitor popular and desirable climbing areas and develop best practices and management plans for these areas (e.g., cave management plans, climbing management plans, vertical trails, individual route applications, and canyoneering routes).*
- *REC-DIS-NMO-MA-05 Coordinate with local partners and climbing groups to either remove or implement maintenance and replacement of existing fixed anchors and bolts and to consider new areas when necessary to meet demands for rock climbing and rappelling while meeting public safety and natural resource desired conditions and where compatible with other National Forest uses.*
- *REC-DIS-NMO-MA-06 Work with partner organizations and user groups to expand public education on safe recreational climbing practices and the use of permanent fixed anchors and bolts. Coordinate enforcement efforts with partner agencies, user groups, clubs, and local organizations to increase public education and build "self-regulation" within the recreational climbing community.*

The forest removed the language requiring written authorization for fixed anchors from the plan in response to comments.

REC-DIS-NMO-DC-04 expresses the need to prevent illegal infrastructures (fixed anchors), for natural resource protection. While this plan component is general, the purpose is not to identify a need or process for authorization of permanent fixed anchors, but to identify a desired condition where illegal infrastructure is not present.

The objector opposes the use of "scenic integrity" in REC-DIS-NMO-G-04 because it is not defined. The forest's website has a page on the scenery management system[2], in which *Landscape Aesthetics: A Handbook for Scenery Management*[3] (USDA 1995) is referenced and linked. This document describes scenic integrity as one of the basic premises of scenery management (p. 32) and pages 2-2 to 2-7 define and discuss scenic integrity and scenic integrity levels.

Conclusion

I find that the forest has already partially addressed the objectors' concern by removing language about written authorization for permanent anchors from the final plan, and by providing management approaches to move towards the approval of routes. The forest has also provided rationale for why existing permanent bolts and anchors cannot be labeled "authorized."

While the forest has provided a definition of "scenic integrity", I find that this description could be more clearly linked to REC-DIS-NMO-G-04.

[2] https://www.fs.usda.gov/detail/tonto/landmanagement/planning/?cid=stelprdb5412120

[3] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5412126.pdf

Instructions

- Add *20201022 RockClimbingChangesforFinal LMP* to the planning record.
- Add a reference in REC-DIS-NMO-G-04 to the plan's scenery section to provide additional context.

TRANSPORTATION

Travel Management Plan

Objection Summary

Greg Warren alleges that 1) the forest's travel plan designations are not consistent with the National Trails System Act; and 2) the travel management plan is inconsistent with the primitive and semi-primitive non-motorized recreation opportunity spectrum desired conditions because it allows motorized game retrieval. Mr. Warren states that, "resource plans developed prior to this plan decision must be evaluated for consistency with the land management plan and updated as necessary."

Objector's Proposed Remedy

Evaluate and update the travel management decision to be consistent with the land management plan, National Trail System Act, and primitive and semi-primitive non-motorized recreation opportunity spectrum setting desired conditions.

Assessment

The forest designated specific roads, trails, and areas for the use of motor vehicles per 36 CFR Part 212, Subpart B under its 2021 travel management decision. Additionally, as part of the travel management decision, cross-country motorized travel for big game retrieval was permitted up to one mile from designated roads and motorized trails with exceptions for areas that otherwise prohibit motorized travel, such as designated wilderness areas.

The planning regulation at 36 CFR 219.15(e) states:

> *Consistency of resource plans within the planning area with the land management plan**.** Any resource plans (for example, travel management plans) developed by the Forest Service that apply to the resources or land areas within the planning area must be consistent with the plan components.* ***Resource plans developed prior to plan decision must be evaluated for consistency with the plan and amended if necessary****.*

The draft ROD (p. 45) states the land management plan is in compliance with (i.e., consistent with) the travel management plan as it does not authorize additional motorized routes nor prohibit existing ones. The 2021 travel management decision had a separate administrative review process, which was completed before the plan revision administrative review process.

Conclusion

I find that the draft ROD documented the plan's consistency with the forest's 2021 travel management plan decision. No amendments to the travel management plan are needed to be consistent with the revised land management plan.

Instructions

None.

Transportation Analysis

Objection Summary

Sierra Club et al. contend the final EIS analyzed for an ecologically and economically sustainable forest road system and did not analyze the specific impacts of roads on air quality, soils, watershed and water resources, riparian areas and wetlands, at-risk species, habitat connectivity, wildlife and plan species, and species of conservation concern. Similarly, the Arizona Association of 4 Wheel Drive Clubs asserts that the socioeconomic analysis lacks meaningful data and analysis, the cumulative effects analysis is insufficient without a broader, interconnected evaluation of motorized designations, and that the draft ROD does not fully disclose effects of motorized designations nor provide sufficient rationale for designations.

Sierra Club et al. also alleges the forest's travel management plan does not meet the requirements of Subpart A of the travel management rule (36 CFR Part 212) because it does not identify or authorize a forest road system that ensures the protection of National Forest System lands and that the plan should incorporate all regulatory requirements, including those of Subpart A of 36 CFR Part 212.

Objectors' Proposed Remedies

Sierra Club et al.

- Revise the land management plan and re-analyze the final EIS to "provide for an ecologically and economically sustainable forest road system."
- Incorporate all regulatory requirements into the land management plan, specifically Subpart A of the travel management rule (36 CFR Part 212).
- Identify current road densities in the final EIS and analyze the alternatives' effects on road density.
- Incorporate road density thresholds into the plan that would protect and maintain ecological integrity and connectivity for at-risk species.

Arizona State Association of 4 Wheel Drive Clubs

- Update the analysis to disclose socioeconomic effects that may occur because of the reduction in motorized use.
- Evaluate and disclose motorized designation decisions on a broader scale.

Assessment

36 CFR 212.5 establishes requirements for the administration of the forest transportation system, the identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands through a science-based roads analysis.

FSM 7700 provides guidance on compliance with 36 CFR 212. FSM 7700, chapter 10, sections 7710.2, 7710.3, and 7712.4 require that the travel analysis process described in FSH 7709.55, chapter 20 be used to inform decisions related to 1) identification of the minimum road system needed for safe and efficient travel and for the administration, utilization, and protection of National Forest System lands; 2) designations of roads, trails, and areas for motor vehicle use under 36 CFR Part 212, Subpart B; and 3)

designations of roads, trails, and areas for over-snow vehicle use under 36 CFR Part 212, Subpart C. None of these apply to the plan revision process.

The forest completed a forest-wide travel management analysis and designated specific roads, trails, and areas for motor vehicle use in 2021 per the travel management rule (36 CFR Part 212, Subpart B). Plan revision does not change the motorized use designations made under the travel management plan, nor does it make other travel management decisions that would warrant analysis or re-analysis of roads for the effects on air quality, soils, watershed and water resources, riparian areas and wetlands, at-risk species, habitat connectivity, wildlife and plan species, and species of conservation concern.

Providing for an economically sustainable forest road system is not required by policy or regulation. Therefore, identification and analysis of an economically sustainable road system is outside the purpose and need of this plan revision.

Conclusion

I find that this programmatic plan revision does not change the motorized use designations made in the forest's travel management plan or make other travel management decisions that warrant analysis or re-analysis.

Instructions

None.

Motorized Use Definitions

Objection Summary

The Arizona State Association of 4 Wheel Drive Clubs is not satisfied with the plan's descriptions of various motorized uses.

Objector's Proposed Remedies

- On page 21 of the plan, change "four-wheeling" to "off-highway vehicle recreation."
- On page 22 of the plan, related to REC-O-05, provide a definition of "system" and replace "jeep" with "full-sized off-highway vehicle".
- On page 27 of the plan, expand the definition of motorized recreation to include motorized vehicle and motorized route system use by forest users for recreational uses such as hunting, fishing, hiking, and rock climbing.
- On page 27 of the plan, related to REC-DIS-MO-DC-02, remove the wording "dust free and in convenient locations" because it is an unobtainable condition. Replace the wording with "should be located in convenient locations and use dust management best practices".
- On page 27 of the plan, related to REC-DIS-MO-DC-02, add wording to show consideration of "providing facilities and services that are necessary or valuable to users."

Assessment

The plan content referenced in this assessment includes:

- *REC-O-05: Every 5 years take appropriate action (e.g., close, decommission, or convert) on at least 10 miles of motorized and/or nonmotorized trails that may not offer recreational value*

(e.g., unsustainable, low-use, or have no remarkable destination value) or are not needed for administrative use.

- *REC-O-03: Within 10 years of plan approval, develop or modify 1 to 4 systems of sustainable, designated motorized trails (e.g., motorcycle, jeep, and off-highway vehicle trails) to adequately provide for these user groups and reduce user conflicts.*
- *REC-DIS-MO-DC-02: Motorized trailheads and staging areas are located in areas convenient for the public and designed to minimize dust.*
- *REC-DIS-MA-05: Consider additional facilities at high-use areas such as toilets and other recreational infrastructure when fees are supported or when the user community is willing to pay the cost of installation and maintenance through a formal partnership agreement, permit, or other contractual tool.*

The objector is concerned that the term "four-wheeling" in the recreation section of the draft plan does not adequately capture the recreation opportunities associated with off-highway vehicle recreation and recommended that the forest replace it with "off-highway vehicle recreation." The forest concurred with the recommendation in the response to comments (final EIS, volume 3, p. 140, comment 2733-4) and replaced the term "four-wheeling" with the term "off-highway vehicle recreation" in the list of recreation opportunities in the plan (p. 23).

The objector raised concerns that the term "system" in the draft plan lacked clarity and suggested that the forest further define this. The forest concurred with the recommendation in the response to comments (final EIS, volume 3, p. 140, comment 2733-5) and revised the term in final plan. The definition of a "system (of trails)" on page 24 of the plan is described as "a group or collection of trails or roads that are interconnected, defined access points, similar recreation destination values."

The objector suggested that the forest replace the term "jeep" in the draft plan with the term "full-sized off-highway vehicle" due to concerns that the term "jeep" is not all inclusive of the types of vehicles that utilize motorized trails on the forest. The recreation analysis section in chapter 2 of the draft plan list "jeeps" as one of the types of vehicles that utilize motorized trails on the forest and not used as an all-inclusive category of vehicles. The forest stated in the response to comments (final EIS, volume 3, p. 140, comment 2733-5) that the term "jeep" is used appropriately and there is no need to replace the term "jeep" with a more encompassing term such as "full sized highway vehicle." REC-O-03 includes jeep trails, as well as off-highway vehicle trails as the types of trails the objective is written to address. The inclusion of "off-highway" vehicles serves the same purpose as the recommendation and therefore, no change between the draft and final land management plan was made to address this concern.

The objector raised concerns with the definition of motorized recreation in the draft plan and recommended expanding the definition to include motorized vehicles and motorized route systems used by forest users for recreational uses such as hunting, fishing, hiking, and rock climbing. The forest addressed the use of motorized vehicles and motorized route systems for access to recreational uses in the response to comment (final EIS, volume 3, p. 140, comment 2733-8). The forest did not make any changes from the draft to final land management plan to further address this concern.

The objector raised concerns with the wording "dust free and in convenient locations" in the recreation desired condition section of the draft land management plan because they allege that it is an unobtainable condition. The objector recommended replacing this with "should be located in

convenient locations and use dust management best practices." As stated in the response to comments (final EIS, volume 3, p. 140, comment 2733-9), the forest agreed with the objector and REC-DIS-MO-DC in the final plan to "Motorized trailheads and staging areas are located in areas convenient for the public and designed to minimize dust," (p. 29).

The objector raised concerns that the plan does not mention the need to provide facilities and services that are necessary or valuable to users. The forest agreed with the concern in the response to comments (final EIS, volume 3, p. 140, comment 2733-9) and revised REC-DIS-MA-05 accordingly.

Conclusion

I find the land management plan, final EIS, and planning record adequately address the objector's concerns. In the final EIS response to comment, the forest acknowledged the need for revisions and clarification to some wording in the recreation sections to better describe various motorized uses and address concerns related to recreational activities. To address the commentor's concerns, the plan was revised to describe and consider off-highway vehicle recreation, the trails system, and the need to minimize dust and to consider valuable facilities and services more accurately (forest plan, pp. 23, 24, and 29).

Other suggestions to replace the term "jeep" with the term "full-sized off-highway vehicle" and to expand the definition of motorized recreation in the recreation section were not made by the forest. The inclusion of "off-highway" vehicles serves the same purpose as the recommendation and therefore, no change between the draft and final forest plan was made to address this concern. As for expanding the definition of motorized recreation, for those forest visitors who utilize motorized trails and system routes as means to get to their primary recreation activity, plan components in the general recreation and dispersed recreation sections in chapter 2 of the plan adequately address management of these activities and areas and such uses are primarily addressed in the roads section of the draft and final forest plans.

Instructions

None.

Roads and Mining Access

Objection Summary

Freeport-McMoRan alleges that RD-G-01, RD-MA-02, and NTMA-G-03 conflict with the General Mining Act of 1872 because the components do not provide provisions for the protection of mining claim access under the act.

Freeport also objects to the addition of "user created routes" to RD-MA-02 because they allege it is broad and arbitrary and capricious.

Additionally, Freeport thinks that the forest's response to their comment on their concern with RD-G-01 and RD-MA-02 were not sufficient.

Objector's Proposed Remedy

Revise RD-G-01, RD-MA-02, and NTMA-G-03 to apply to non-mining uses only and not apply to mining claims protected under the General Mining Act of 1872.

Assessment

The plan content referenced by the objector includes:

- *RD-G-01: New roads should not be constructed in areas designated as primitive in the recreation opportunity spectrum (ROS), or current protocol.*
- *RD-MA-02: 2 Prioritize decommissioning of roads or user created routes that impact flow regimes, are redundant routes, cause mass movement of soils and sediment, are built within the riparian management zone, or have substantial negative impacts to at-risk species.*
- *NTMA-G-03: Construction of new motorized routes should not intersect national trails located within primitive or semiprimitive nonmotorized recreation opportunity spectrum classes. Management activities should maintain public access to designated national trails.*

As stated in the land management plan (p. 13), guidelines are plan components which:

> *…describe constraints on project and activity decision-making that allow for departure from its terms, so long as the intent of the guidelines is met (36 CFR 219.7€(1)(iv)). Guidelines serve the same purpose as standards, but they differ from standards in that they provide flexibility in defining compliance, while standards are absolute constraints. In other words, guidelines are mandatory with some flexibility on how they are implemented, so long as they are meeting the intent of the existing guideline. Projects may deviate from the exact language of the guideline so long as they are meeting purpose of the guideline and any deviation from the purpose or intent requires a plan amendment.*

The plan on page 14 also states that management approaches are option plan content which:

> *…do not offer plan direction but describe an approach or strategy to manage the unit to achieve a desired condition. Management approaches often convey how plan components work together to achieve the desired condition. They may also describe context, intent, priorities, partnership opportunities and coordination activities, or future inventories or assessments. Not every resource topic area has a management approach heading as they are not required or a plan component. Changes to management approaches do not require plan amendments.*

Similar information was provided in the response to comments to the objector's concerns regarding RD-G-01 (final EIS, volume 3, p. 254, comment 2816-67) and RD-MA-02 (final EIS, volume 3, pp. 254-255, comment 2816-68). The forest responded to these comments consistent with direction at 40 CFR 1503.4. The objector did not provide comments on NTMA-G-03.

The plan on page 12 states that:

> *Plan components guide future project and activity decision-making, are required in the forest plan, and are the main substance of the document. They include desired conditions, objectives, standards, guidelines, suitability of lands, and goals. Plan components should (1) provide a strategic and practical framework for managing the forest; (2) should be applicable to the*

> *resources and issues of the forest; and (3) should reflect the forest's distinctive roles and contributions.*

Therefore, the plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Projects and activities will be developed to be consistent with plan direction, as well as applicable laws, regulations, and policies, including, for example, the Mining Law of 1872, the Organic Administration Act of 1897 and the travel management rule. Plan components do not need to reiterate existing law, regulation, or policy (36 CFR 219.2(2)(b)). As stated in the plan (p. 2):

> *Management of National Forest System lands is also guided and constrained by laws, regulations, policies, practices, and procedures that are in the Forest Service directive system. These are generally not repeated in land management plans but can if needed for clarity. Any constraint on the public needs to be imposed by law or regulation, or through the issuance of an order by the responsible official under 36 CFR part 261, Subpart B.*

Plan components are subject to valid existing rights. Locatable minerals project proposals are reviewed by the authorized official; part of this review includes determining, where feasible, it may be possible to minimize impacts to surface resources (36 CFR 228.4, 36 CFR 228.8, and FSM 2800, chapter 2810, section 2817.23).

As stated in the response to comment (final EIS, volume 3, p. 128, comment 2970-753):

> *The intent of the forest plan is to provide broad overarching plan direction. The forest plan has desired conditions that the road system is sustainable and has minimal adverse impacts to resources, and objectives to decommission roads identified for decommissioning (through site-specific analysis) and or unauthorized user created routes.*

Conclusion

I find that RD-G-01, RD-MA-02, and NTMA-G-03 do not conflict with the Mining Law of 1872, 36 CFR Part 228, Subpart A, nor 36 CFR Part 212.

Instructions

Include a statement in chapter 1 of the plan that nothing in the plan affects, nor does it have the authority to affect, valid existing rights established by statute or legal instruments.

ARIZONA NATIONAL SCENIC TRAIL

Arizona National Scenic Trail Plan Components

Objection Summary

Freeport-McMoRan takes issue with multiple aspects of the plan direction for the National Trails Management Area, such as the update to the scenery management system. The objector is also concerned with the forest developing Arizona National Scenic Trail plan components without "…consultation with the Trail Advisory Council as is required by the National Trail Systems Act."

Objector's Proposed Remedies

- Remove the new wording "intended to provide for a variety of outdoor recreation uses as well as the conservation of nationally significant scenic, historic, natural, or cultural qualities of a landscape" from the first paragraph on page 152.
- Remove the new wording "and corridor" from NTMA-DC-06.
- Remove the new wording "scenery viewed…is consistent with…or very high scenic integrity objectives" from NTMA-DC-07.
- Remove the new wording "enhance...purpose...the recreation opportunity spectrum and scenic integrity objectives consistent with or complementing the pre-existing condition" from NTMA-G-02.
- Remove the first sentence of NTMA-G-03.
- Remove NTMA-G-06, NTMA-G-05, and NTMA-G-12 from the plan.
- Remove NTMA-MA-02 from the plan.
- Return NTMA-G-07 to the draft plan's version.

Assessment

Plan content referenced by the objector includes:

- *NTMA-DC-06: The Arizona National Scenic Trail and corridor are well-defined and provide high-quality, primitive hiking, mountain biking, equestrian opportunities, and other compatible nonmotorized trail activities. The significant scenic, natural, historic, and cultural resources within the trail's corridor are conserved. The trail provides visitors with expansive views of the natural-appearing landscapes.*
- *NTMA-DC-07: Scenery viewed from the Arizona National Scenic Trail is consistent with high or very high scenic integrity objectives. The foreground of the trail is natural-appearing.*
- *NTMA-G-03: Construction of new motorized routes should not intersect national trails located within primitive or semiprimitive nonmotorized recreation opportunity spectrum classes. Management activities should maintain public access to designated national trails.*
- *NTMA-G-05: Landings created for timber harvest or mechanical treatments should not be visible from national trails.*
- *NTMA-G-06: Fences crossing national trails should be designed with gates and pass-throughs that accommodate multiple modes of nonmotorized traffic. Fences should be compatible with the scenic objectives of the area.*[91]

  [91] *As defined in the Scenery Management System.*
- *NTMA-G-07: Special use authorizations that affect national trails should include measures to avoid impacts to visual resources.*
- *NTMA-G-12: To protect scenic integrity, special use authorizations for new communication sites, utility corridors, and renewable energy sites should be avoided. Where unavoidable, design elements should be implemented to maintain scenic integrity in the trail corridor and the values for which the Arizona National Scenic Trail was designated.*
- *NTMA-MA-02: Maintain open and frequent communication with partners and address conflicts (user or management) as soon as possible.*

Language in the first paragraph on page 154 of the plan is distilled directly from sections 3 and 5(27) of the National Trails System Act and accurately summarizes the intent of those two sections.

The final EIS (volume 1, pp. 16-17 and 20) states that:

> *Plan components (objectives, standards, and guidelines) and plan content (distinctive roles and contributions, management approaches, and descriptions) have been updated based on comments received, updates in best available scientific information, and internal review. Most of these updates are to clarify intent, update language, or add missing information without changing the purpose or analysis.*

The *Tonto Land Management Plan Changes Between Draft and Final* (planning record 2494) also reflects rationale for the changes. The additions of the plan components were not expected to substantially change the management direction originally provided in the draft plan (40 CFR 1502.9(d)(4)). Further, plan components are defined in FSH 1909.12, chapter 20, section 22.1 as guides for future project and activity decision-making. They cannot interfere with statuary or valid existing rights. Plan components are guides for Forest Service personnel, not the public, and are not commitments to final decisions in approving projects.

NTMA-DC-07 establishes high or very high visual integrity objectives for the Arizona National Scenic Trail. Section 3 of the National Trails System Act establishes national scenic trails and identifies "…nationally significant scenic…" among the qualities (i.e., nature and purposes) of a national scenic trail. The forest responded to this in the response to comments (final EIS, volume 3, pp. 146-147, comment 2816-91):

> *Design elements mitigating impacts to scenery will be handled at the project level where foreground and middle ground will be assessed. The 2009 national scenic trail designation gave added importance to the adequate consideration of scenery resources in the identification of the permanent location of the Trail. Alternatives for the national trail right-of-way are analyzed in the Arizona Trail Comprehensive Plan environmental assessment that accompanies this comprehensive plan. The Arizona National Scenic Trail Environmental Assessment proposes a national trail right-of-way one mile in width, or ½ mile on either side of the centerline of the trail. The national trail right-of-way width is largely based upon the Forest Service's Scenery Management System (See chapter 5, section 5.2.2 Visual, Aural and Dark Sky Resources) and includes significant resources associated with the trail. The Forest Service feels the viewshed protections are appropriate and comply with the National Trail System Act and the planning rule.*

Also see the *Scenery and Mining* section of this document.

Conclusion

I find the plan component issues the objector raised regarding scenery management system were written within the guidance described in FSH 1909.12, chapter 20, sections 22.1 and 24.43. The addition of plan components was completed in accordance with the planning rule and are not expected to substantially change the management direction originally provided in the draft plan. Plan components addressing the scenic integrity of the National Trails Management Area for the Arizona National Scenic Trail are within the spirit of Section 3 of the National Trails System Act to identify "…nationally significant scenic…" among the qualities of a national scenic trail.

The forest properly established NTMA-G-03 in alignment with the forest's 2021 travel management decision. Travel management decisions are separate from plan revision.

The forest appropriately used the term “corridor” in the establishment of the Arizona National Scenic Trail Management Area. This is a term used in FSH 1909.12, chapter 20, section 24.43 (bold emphasis added):

> *…If the right-of-way has not been selected, either through legislation or publication in the Federal Register, the Interdisciplinary Team should use other information to delineate a national scenic and historic trails **corridor** that protects the resource values for which the trail was designated or is being proposed for designation (16 U.S.C 1244(b)).*

Lastly, regarding the development of Arizona National Scenic Trail related plan components, the National Trails System Act at 16 USC 1244(d) directs the Secretary to establish an advisory council within one year of designation. However, the same section of the act also states, “If the appropriate Secretary is unable to establish such an advisory council because of the lack of adequate public interest, the Secretary shall so advise the appropriate committees of the Congress.” In 2019, the secretary terminated the Arizona National Scenic Trail Advisory Council with a memorandum, stating that the purposes of the council can be fulfilled by “…ongoing coordination and collaboration among the Federal Agencies, State, local government and private interests.”

Instructions

None.

Arizona National Scenic Trail Objectives

Objection Summary

Freeport-McMoRan is concerned with the trail management objectives language that was added to NTMA-S-01 due to the effect the language may have on their mining operations.

Objector’s Proposed Remedies

- Add more information on:
  - what a trail management objective is.
  - where a trail's trail management objective can be found; and
  - what regulations stipulate the designation of a trail management objective.
- Delete the addition of "conform to their Trail Management Objectives” from the plan.

Assessment

The plan component referenced by the objector includes:

> *NTMA-S-01: Designated national trails conform to their Trail Management Objectives (TMO) and shall be maintained to National Forest Service standards.*

Specific to NTMA-S-01, the forest responded that trail management objectives are how the forest plans for and manages National Forest System trails (including the Arizona National Scenic Trail), including access objectives (final EIS, volume 3, p. 28, comment 2736-26). Each trail has its own unique set of trail management objectives, which are not defined in the land management plan, per FSH 2309.18, chapter 10, section 12:

Establish and document Trail Management Objectives (TMOs) and associated management requirements by assessing the interaction of resource use, recreation opportunities, and constraints of the area…Identify trail maintenance schedules and priorities for trail construction and reconstruction based on TMOs, anticipated funding, and established priorities.

Plan components are developed regardless of whether there is mineral potential or not and trail management objectives apply to all National Forest System trails, not only national trails.

Conclusion

I find that NTMA-S-01 is consistent with FSH 2309.18.

Instructions

None.

Arizona National Scenic Trail Protection

Objection Summary

Greg Warren does not agree with the forest's consideration and management direction of the Arizona National Scenic Trail. The objector alleges that the final plan will not protect the trail corridor to ensure that the values, nature, qualities, and purposes for which the trail was established remain intact or are restored and protected from incompatible uses and development, in violation of the National Trails System Act. Mr. Warren alleges that the forest violated multiple laws, regulations, and policies and did not:

1. Complete a thorough analysis of the transportation system or analysis of effects on the Arizona National Scenic Trail.
2. Adequately consider Mr. Warren's comments; nor
3. Adequately protect the Arizona National Scenic Trail corridor by failing to:
    a. Follow the National Scenic Trail's Act rights-of-way requirements.
    b. Promote primitive and semi-primitive recreation opportunity spectrum class conditions that would protect the Arizona National Scenic Trail.
    c. Establish a one-half mile Arizona National Scenic Trail management corridor on either side of the travel route with plan components to protect the Arizona National Scenic Trail and the scenic, historic, natural, and cultural resources of the area, per the *ROS Book* (USDA 1986).

Objector's Proposed Remedies

- Provide a map that shows the recreation opportunity spectrum settings along the trail.
- Provide for ecosystem integrity by restoring roads in established semi-primitive non-motorized Arizona National Scenic Trail settings, including Maintenance Level 1 and 2 roads in the Arizona National Scenic Trail corridor.
- Define e-bikes as a motorized vehicle and subject to 36 CFR Part 212.
- Close Operational Maintenance Level 2 Roads to motor vehicle use, such as the Edward's Park Road 422, to be consistent with National Trails System Act Section 7(c) requirements.
- Complete a supplemental EIS to update the affected environment and the Arizona National Scenic Trail effects analyses, to provide a description of how each alternative will achieve or

contribute to protecting the Arizona National Scenic Trail, and to show that the recreation and scenery analyses are consistent with the recreation opportunity spectrum and scenery management system.

- Update the transportation analysis to:
    a. Include a review of the miles of national forest system roads and trails in each alternative.
    b. Analyze, in narrative and cross tabular formats with publicly available geospatial data, the following relationships for each alternative:
        i. Miles of projected permanent and temporary roads in the Arizona National Scenic Trail management corridor,
        ii. Miles of projected designated motor vehicle uses trails in the Arizona National Scenic Trail management corridor, and
        iii. Acres of each established recreation opportunity spectrum class that is found in the Arizona National Scenic Trail management corridor.
- Recognize that the recreation opportunity spectrum classes should be a primitive or semi-primitive non-motorized to provide for the nature and purposes of the Arizona National Scenic Trail. Manage any inconsistencies to minimize effects on the desired recreation opportunity spectrum setting.
- Recognize that the National Trails System Act Section 7(a)(2) identifies the need for national trails to be an integral part of multiple-use plans.
- Modify the proposed action and alternatives or develop an alternative to include an Arizona National Scenic Trail management area that extends at least one-half mile on both sides of the travel route and include plan components that 1) protect the nature and purposes of the Arizona National Scenic Trail; and 2) provide for natural ecological processes and not just the visual appearance of naturalness in the Arizona National Scenic Trail corridor. The nature and purposes description of the Arizona National Scenic Trail should be the main desired condition for this management area.
- Add the following plan components:
    a. Desired condition: *The nature and purposes of the Arizona National Scenic Trail are to provide for high-quality scenic, non-motorized recreation opportunities and to preserve the corridor for the conservation and enjoyment of nationally significant scenic, historic, natural, and cultural qualities.*
    b. Desired condition: *Semi-Primitive Non-Motorized or Primitive [recreation opportunity spectrum] settings are protected or restored.*
    c. Standard: *Resource management actions and allowed uses must be compatible with maintaining or restoring Primitive or Semi-Primitive Non-Motorized [recreation opportunity spectrum] class settings. Accepted Semi-Primitive Non-Motorized [recreation opportunity spectrum] class inconsistencies include existing National Forest System Maintenance Level 2 and 3 roads that are not utilized as the Arizona National Scenic Trail travel route.*
    d. Standard: *Motor vehicle use by the general public is prohibited on the Arizona National Scenic Trail travel route unless that use: 1. Is necessary to meet emergencies; 2. Is necessary to enable adjacent landowners or those with valid outstanding rights to have reasonable access to their lands or rights; 3. Is for the purpose of allowing private landowners, who have agreed to include their lands in the Arizona National Scenic Trail corridor by cooperative agreement, to use or cross those lands or adjacent lands from*

time to time in accordance with Forest Service regulations; or 4. Is on a motor vehicle route that crosses the Arizona National Scenic Trail, if that use will not substantially interfere with the nature and purposes of the Arizona National Scenic Trail.

e. Suitability: *Lands are not suitable for timber production and timber production is not an objective.*

- Delete any proposed Arizona National Scenic Trail plan component that may conflict with the above proposed plan components.
- Ensure that Arizona National Scenic Trail standards or guidelines clearly describe how they provide for primitive or semi-primitive non-motorized recreation opportunity spectrum settings.

Assessment

Analysis of the transportation system

An assessment of current conditions of the transportation system and associated infrastructure is provided in chapter 8 of the 2017 forest plan assessment (volume II). This document is incorporated by reference in the final EIS where it states that, "the proposed action (forest plan) focuses on the needs to change identified in the assessment and incorporates significant issues raised during the scoping process," (p. 7).

A detailed analysis of the transportation system was also conducted through the travel management process, which was completed in 2021, separate from plan revision. The travel management record of decision designated a forest wide system of roads, motorized trails, and areas for motor vehicle use, in compliance with the travel management rule (36 CFR 212.51). The travel management analysis reflects the current condition of the forest's transportation system used in conducting the analysis in the final EIS for plan revision.

Analysis of effects on the Arizona National Scenic Trail

I concur with the forest's responses regarding the objector's request for additional analysis in that the commentor is not specific about which aspects need updating and does not articulate what would be included in the newly suggested alternative (comment 79-17). The plan revision process does not require the level of site-specificity that the commenter is requesting and is outside the scope of this project (comment 79-15). The analysis completed for the Arizona National Scenic Trail and non-motorized recreation opportunities meet the requirements outlined in the National Trails System Act, the National Forest Management Act, NEPA, and Council on Environmental Quality regulations.

Consideration of comments

The forest considered comments in volume 3 of the final EIS, in compliance with 40 CFR 1503.4. The ROD also discussed the response to comments on pages 25-26.

The response to comments shows that there was a lack of clarity about exactly what the objector wanted to be done with his attachments.

Arizona National Scenic Trail corridor protection

National Trails Scenic Act rights-of-way

Section 7(2) of the National Trails Scenic Act charges the Secretary with selecting the trail right-of-way. This charge is delegated to the Chief of the Forest Service (FSM 2300, chapter 2350, section 2353.04b), not a forest supervisor. Further, FSH 1909.12, chapter 20, section 24.44 does not include a requirement to identify nor establish a right-of-way. However, if a national trail right-of-way exists, land management

plans must reference the right-of-way, or may identify a corridor or geographic area around a trail or use other means to identify where trail management direction applies (FSH 1909.12, chapter 20, section 24.43(1)(b)). At the time of this review, a right-of-way for the Arizona National Scenic Trail had not been established.

Therefore, this part of the objection is outside the scope of the plan. Also, see the *Arizona National Scenic Trail Advisory Council* section of this document.

Primitive and semi-primitive recreation opportunity spectrum classes

This part of the objection has been addressed in the responses to the *Travel Management Plan* and *Recreation Opportunity Spectrum* sections of this document.

Arizona National Scenic Trail management corridor

The forest established a one-half mile Arizona National Scenic Trail management corridor on either side of the travel route, as documented on page 152 of the plan: "The Arizona National Scenic Trail corridor is defined as approximately 0.5 miles from the centerline of the trail." Further, the plan establishes associated plan components to support management of the corridor (pp. 152-155).

The analysis on pages 240-241 of volume 2 of the final EIS summarizes the forest's commitment to protect the Arizona National Scenic Trail with its statement about management direction for national trails (bold emphasis added):

> *…this direction articulates how to manage the segments of trail within the forest boundaries to further* ***protect*** *the values for which they were designated. This additional management direction would lead to greater* ***protection*** *of the trail's values than in alternative A, because the standards and guidelines restrict non-conforming uses, prohibit the sale and extraction of common variety minerals within trail corridors,* ***protect*** *scenic values along trails, and enhance economic values to nearby communities. This can lead to improved user satisfaction rates and higher values and perception of the forest by local communities. This would also help achieve desired conditions related to reducing user conflicts (NTMA-DC-02 and REC-DC-07).* (Bold emphasis added)

The plan contains components (pp. 152-155) for all national trails, as well as components specific to the Arizona National Scenic Trail, to provide sideboards for activities and projects that may affect these areas, consistent with the requirements of the planning rule (FSH 1909.12, chapter 20, section 24.43). The National Trails Management Area components in the plan (pp. 152-155), such as NTMA-DC-06, NTMA-S-02, and NTMA-G-10, demonstrate management direction to protect the nature and purposes, and the Arizona National Scenic Trail itself, within the boundaries of the forest.

> *NTMA-DC-06: The Arizona National Scenic Trail and corridor are well-defined and provide high-quality, primitive hiking, mountain biking, equestrian opportunities, and other compatible non-motorized trail activities. The significant scenic, natural, historic, and cultural resources within the trail's corridor are conserved. The trail provides visitors with expansive views of the natural-appearing landscapes.*
>
> *NTMA-S-02: Motorized use shall not be allowed on newly constructed segments of the Arizona National Scenic Trail.*

NTMA-G-10: Linear utilities and rights-of-way should not be constructed over national trails. Where unavoidable, these should be limited to a single Arizona National Scenic Trail crossing per special use authorization to maintain the integrity of the trail corridor and values for which the Arizona National Scenic Trail was designated.

Also see the *Travel Management Plan* and *Recreation Opportunity Spectrum* sections of this document.

The objector specifically took issue with the plan identifying the Arizona National Scenic Trail corridor as suitable for timber production. However, REC-DIS-G-04 states that National Forest System Trails should not be used for management activities, including timber. Additionally, timber related activities (that occur anywhere) would still need to comply with all laws, regulations, and policies for the protection of the environment.

REC-DIS-G-04: National Forest System trails should not be used for management activities (e.g., fire, timber, and range management) that negatively impact trail management objectives, unless alternatives entail greater resource damage. Adverse impacts to trail features should be restored as part of project completion.

Objector's Alleged Violation of Law, Regulation, or Policy

16 USC 1242(a)(2), 1244(e), and 1246(c)

Section 1242(a)(2) declares that the national trails system shall include national scenic trails:

…which will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. National scenic trails may be located so as to represent desert, marsh, grassland, mountain, canyon, river forest, and other areas, as well as landforms which exhibit significant characteristics of the physiographic regions of the Nation.

The forest is providing for the Arizona National Scenic Trail through the plan's National Trails Management Area direction to protect the Arizona National Scenic Trail, within the boundaries of the forest.

Section 1244(e) directs agencies to complete a comprehensive plan for most national scenic trails within two years national scenic trail designation. The Arizona National Scenic Trail's comprehensive management plan is in development, under the responsibility of the Forest Service's Southwestern Region's Regional Office (FSM 2300, chapter 2350, section 2353.04g(3)).

Section 1246(c) defines which facilities, activities, motor vehicle use, trail markers, uniform markers, and trail interpretation sites are allowed on national, scenic, or historic trails. These items would be addressed through the comprehensive plan for the Arizona National Scenic Trail or on a project specific basis, consistent with applicable law, regulation, and policy for the management of recreation resources. Plan components contained within a land management plan shall "provide for the nature and purposes of national scenic and historic trails in the plan area" and "take into consideration other aspects of the plan related to the trail such as access, cultural and historic resources, recreational settings, scenic character, and valid existing rights."

36 CFR 219.3, 219.10(a), 219.10(b)(1)(i), and 219.10(b)(1)(vi)

36 CFR 219.3 requires the responsible official to use the best available scientific information to inform the planning process. The responsible official documented compliance with 36 CFR 219.3 on page 34 of the draft ROD, under the heading, "Best Available Scientific Information."

36 CFR 219.10 requires integrated resource management for multiple use including plan components. The draft ROD on pages 18-19 demonstrated compliance with this aspect of the planning rule (36 CFR 219.10).

36 CFR 219.10(b)(1)(i) requires plan components to provide for sustainable recreation. The forest demonstrated compliance with this aspect of the planning rule as documented in the recreation plan components (pp. 23-35). For example, the word "sustainable" is included 18 times within this section of the plan.

36 CFR 219.10(b)(1)(vi) requires appropriate management of other designated areas or recommended designated areas in the plan area, including research natural areas. The plan establishes management direction for a list of designated and recommended areas, including research natural areas (pp. 129-162).

Council on Environmental Quality's NEPA regulations at 40 CFR 1502.14, 1502.15, 1502.16, 1502.23 (2020), 1502.24 (2005), 1503.4(a) (2005), 1508.7 (2005), and 1508.8 (2005)

40 CFR 1502.14 requires plan development to analyze environmental effects, evaluate reasonable alternatives and limit their consideration to reasonable alternatives, include a no action alternative, identify a preferred alternative, and incorporate mitigation measures. **40 CFR 1502.16** further outlines requirements for the environmental consequences analysis.

In relation to 40 CFR 1502.14 and 1502.16, the objector alleges that the forest violated these regulations in that the final EIS did not analyze for the conservation of the Arizona National Scenic Trail; did not provide plan components that adequately protect the Arizona National Scenic Trail; the final EIS and ROD did not consider a reasonable range of alternatives that would protect the scenic trail; and the final EIS did not thoroughly analyze effects on the Arizona National Scenic Trail.

The forest demonstrated that it considered a reasonable range of alternatives as documented in the ROD:

> *My decision to select alternative B (modified) as the revised Tonto National Forest Land Management Plan is based on a careful and reasoned comparison of the environmental consequences of and responses to issues and concerns for each alternative.* (p. 12)
>
> *In addition to the selected alternative, I considered three other alternatives analyzed in detail, which are discussed below. All reasonable alternatives to the proposed action must meet the purpose and need for change and address one or more significant issues. I identified those alternatives that met both the purpose and need for change and created a reasonable range of outputs, costs, management requirements, and effects from which to choose.* (p. 28)

More specific to this objection issue and the Arizona National Scenic Trail, the recreation section of the final EIS (volume 1, pp. 68-133) documented consideration of a range of alternatives and environmental

effects. While the size and location of the Arizona National Scenic Trail does not change between alternatives, management of the trail and the effects of this varies between alternatives per the recreation opportunity spectrum. This was documented on pages 78, 87, 88, 95, and 96 of volume 1 of the final EIS. Alternative D does not include specific discussion of the Arizona National Scenic Trail. The final EIS specifies that all alternatives manage for special qualities of existing designated areas, including the Arizona National Scenic Trail (final EIS, volume 1, p. 16). Additionally, recreation opportunity spectrum was included in the recreation analysis of each alternative. As stated in the final EIS, "The existing recreation opportunity spectrum reflects current conditions, as amended with the [forest's travel management ROD]. Recreation opportunity spectrum changes by alternative to reflect the desired management of each alternative," (final EIS, volume 1, p. 17). The recreation opportunity spectrum existing conditions (alternative A) are analyzed in the travel management final EIS and are incorporated by reference into the land management plan's final EIS.

The recreation opportunity spectrum analysis includes a comparison of alternatives, which includes consideration of plan components for national trails and the Arizona Scenic Trail. The final EIS (volume 1, p. 101) states that:

> *All action alternatives (alternative B, C, and D) include many more specific recreation plan components that focus on maintaining or achieving the desired recreation opportunity spectrum setting including a guideline that reads "all project-level decisions, implementation activities, and management activities should be consistent with or move the area toward the appropriate recreation opportunity spectrum (ROS) or current protocol" (REC-G-10). These additional plan components better ensure the recreation opportunity spectrum is used to manage recreation and greater effects related to using the recreation opportunity spectrum than in alternative A. However, this alternative is closest to the existing condition than alternatives B and C.*

Analysis of non-motorized trails is included in alternative D. Better clarity could have been provided by specifying the effects to national trails by name in the dispersed recreation analysis of alternative D in the same manner as alternatives B and C.

The plan provided components for the protection and management of National Trails through the National Trails Management Area, including specific components and management approaches for the Arizona National Scenic Trail (plan, pp. 152-154).

40 CFR 1502.15 requires a description of the affected environment. The objector alleges that the final EIS did not include information on the Arizona National Scenic Trail in the affected environment section.

The forest described the recreation environment on pages 69-74 (volume 1) of the final EIS. A specific description of the Arizona National Scenic Trail was not included in the affected environment section. However, the forest did describe the four existing national trails, including the Arizona National Scenic Trail in the *Effects Common to All Alternatives* section of the recreation analysis (final EIS, volume 1, p. 78). More detailed information on the current condition of the recreation resource is in chapter 5 of the *Assessment Report of Social, Cultural, and Economic Conditions, Trends, and Risks to Sustainability* (volume II). Specific information on the current recreation opportunity spectrum class areas on the forest is on pages 127-130.

40 CFR 1502.23 includes methodology and scientific accuracy requirements for agencies. Specific to this regulation, the objector alleges that the forest did not adequately consider the *ROS Book* (USDA 1986) in its analysis of effects on the Arizona National Scenic Trail and other primitive and semi-primitive recreation opportunity spectrum classes.

The forest demonstrated compliance with this regulation as documented in the *Use of Best Available Scientific Information* section of the final plan (p. 8):

> *The foundation from which the plan components were developed for the forest plan was provided by the assessment[1] of the Tonto National Forest and best available scientific information and analysis therein. From this foundation, the interdisciplinary team used the best available scientific information to develop the proposed action and the alternatives and analysis in the environmental impact statement (December 2019).*

Further, the recreation analyis's *Environmental Effects* section on page 74 (volume 1) of the final EIS references the assumptions and methods used in the analysis, which are further described in appendix B of volume 4 of the final EIS. Appendix B describes how the forest used the recreation opportunity spectrum in its analysis (final EIS, appendix B, pp. 4-5). This section also references the *ROS Book*.

40 CFR 1508.7, 1508.8, 1502.24, and 1503.4(a): The 2005 versions of 40 CFR 1508.7, 1508.8, 1502.24, and 1503.4(a) cited by the objector are not applicable, as these regulations have since been revised.

Executive Order 13195

In general, this executive order calls for continuance of the National Trails System Act and other laws, as well as for better establishing and operating the National Trail System. Section (b) of the order calls for protecting trail corridors associated with national scenic trails "…to the degrees necessary to ensure that the values for which each trail was established remain intact." The final EIS (pp. 240-241) documents the forest's commitment to protect the Arizona National Scenic Trail with its statement about management direction for national trails:

> *…this direction articulates how to manage the segments of trail within the forest boundaries to further protect the values for which they were designated. This additional management direction would lead to greater protection of the trail's values than in alternative A, because the standards and guidelines restrict non-conforming uses, prohibit the sale and extraction of common variety minerals within trail corridors, protect scenic values along trails, and enhance economic values to nearby communities. This can lead to improved user satisfaction rates and higher values and perception of the forest by local communities. This would also help achieve desired conditions related to reducing user conflicts (NTMA-DC-02 and REC-DC-07).*
>
> *NTMA-DC-02: Use conflicts among national trail users are infrequent.*
>
> *REC-DC-07: Conflicts among various recreation users and with other multiple uses are infrequent and easily resolved.*

Remedies Responses

Recreation opportunity spectrum map:

While recreation opportunity spectrum maps are not required plan content, having a map showing the recreation opportunity spectrum settings, as recommended by the objector, would be beneficial to include in the planning record.

Define e-bikes as a motorized vehicle subject to 36 CFR 212:

The designation of e-bikes as motorized (or not) is outside of the scope of this plan and is already addressed by 36 CFR 212. Per FSH 1909.12, chapter 20, section 22.1, a plan "may be used to carry out laws, regulations, or policies, but should not merely repeat existing direction from laws, regulations, or directives," (p. 33).

Further, the objector's concern is addressed with NTMA-G-13 (p. 154): E-*bikes should not be allowed on the Arizona National Scenic Trail, unless a regulatory exception authorized by the National Trails System Act is met or there is an exception in the enabling legislation for the trail.*

Close Operational Maintenance Level 2 roads to motor vehicle use to be consistent with the National Trails System Act:

This suggestion would be outside the scope of the plan and more appropriate for the travel management planning process.

Complete a supplemental EIS:

The forest responded to this concern in the response to comments (final EIS, volume 3, pp. 143-144, comment 79-17):

> *The Forest Service does not feel that a supplemental environmental impact statement is needed for the analysis of the forest plan. The required analysis outlined in the National Trails System Act, NFMA, and NEPA Council on Environmental Quality regulations are met in the final forest plan and final environmental impact statement…*

Update the transportation analysis:

The forest's response to comments (final EIS, volume 3, p. 143, comment 79-15) on this topic stated:

> *We disagree that additional analysis with cross tabular tables because this plan revision process…does not require the level of site-specificity that the commenter is requestion and is outside the scope of this project.*

Additionally, a review of the miles of National Forest System roads and trails for each alternative would be more appropriate for the travel management process. Analyzing the relationships of miles of projected permanent and temporary roads, miles of projected designated motor vehicle use, and acres of recreation opportunity spectrum class within the Arizona National Scenic Trail management corridor would be more appropriate for the Arizona National Scenic Trail Comprehensive Plan's EIS.

Additional plan components:

Regarding the objector's remedies concerning additional plan components, the land management plan establishes an Arizona National Scenic Trail management corridor: "The Arizona National Scenic Trail corridor is defined as approximately 0.5 miles from the centerline of the trail," (p. 152). Further, the plan establishes supportive plan components (pp. 152-155). These components were written in accordance

with direction in FSH 1909.12, chapter 20, sections 22.1 and 24.43. No additional components are necessary to manage for the Arizona National Scenic Trail in accordance with the National Trails System Act, nor do the plan components conflict with the National Trails System Act

Conclusion

I find that the forest adequately considered a range of reasonable alternatives, as summarized in the ROD (pp. 28-34). The plan components that guide the forest's management direction for national trails and the Arizona National Scenic Trail were written within the guidance described in FSH 1909.12, chapter 20, sections 22.1 and 24.43 and met analysis and public participation requirements. The final EIS and the plan document the forest's commitment and responsibility under National Trails System Act to protect the Arizona National Scenic Trail. A supplemental EIS is not required.

Instructions

- Ensure mapping analysis and discussion is located within the planning record and is publicly available to support Arizona National Scenic Trail recreation opportunity spectrum settings and plan components.
- In the final EIS, specifically address national trails in the dispersed recreation analysis for alternative D in a same manner as alternatives B and C.

Arizona National Scenic Trail Location

Objection Summary

Regarding the Forest Service's response to comments on page 143, Greg Warren would like the final plan and final EIS to show that the Arizona National Scenic Trail can be located anywhere within the designated right-of-way, if the location is within alignment with the National Trails System Act and other laws and regulations. This recognition would be in alignment with the objector's reference to Section 5 of the National Trails System Act.

Objector's Proposed Remedy

Update the plan and final EIS to state that the Arizona National Scenic Trail can be located anywhere within the designated right-of-way.

Assessment

The objector would like the plan to state that the trail can be located anywhere within the right-of-way. However, determining a National Scenic Trail's right-of-way is outside the scope of the plan. The forest has the authority to prescribe trail management in compliance with FSH 1909.12, chapter 20, section 24.43(1)(b), which requires that land management plans must reference the identified National Trail right-of-way, if established (it has not been at this time), or otherwise may identify a corridor or geographic area around the trail or use other means to identify where trail management direction applies.

The forest appropriately invokes its authority to establish a management area around the trail as articulated in the following statement from page 241 of the plan (bold emphasis added):

The Arizona National Scenic Trail stretches over 800 miles across Arizona from Mexico to the Utah border, showcasing the state's diverse vegetation, wildlife, wilderness and scenery, and providing unparalleled opportunities for hikers, mountain bikers, equestrians, and other trail users. The Omnibus Public Land Management Act of 2009 (P.L. 111-11) amended the National Trails System Act (P.L. 90- 543) to designate the Arizona Trail as a national scenic trail. ***The Arizona National Scenic Trail corridor is defined as approximately one-half mile either side of the centerline of the trail.*** *The Tonto National Forest manages about 200 miles of the Arizona National Scenic Trail on the Globe, Mesa, Tonto Basin, and Payson Ranger Districts*.

The forest is consistent with FSH 1909.12 because FSH 1909.12, chapter 20, section 24.43(1)(b) requires that land management plans must reference an identified national trail right-of-way, if established, or otherwise may identify a corridor or geographic area around the trail or use other means to identify where trail management direction applies.

Management approaches describe an approach or strategy to help achieve desired conditions. They are not plan components and therefore not binding (36 CFR 219.7(f)(2); FSH 1909.12, chapter 20, section 22.4). The plan's *Other Plan Content* section on page 13 describes forest requirements to establish management areas geographic areas or both in addition to designated and recommended areas. This management approach help move towards a desired future condition for the Arizona National Scenic Trail and plan.

The framework in chapter 3 of the plan aligns with the management approach required for the management and administration of the Arizona National Scenic Trail. As the Arizona National Scenic Trail Comprehensive Plan is being developed, the forest has the authority to define a geographic area where trail management direction applies.

Conclusion

I find that the objector's contention that the plan should mention that the Arizona National Scenic Trail can be located anywhere within the right-of-way to be outside the scope of this plan. FSH 1909.12, chapter 20, section 24.43 does not include requirements to identify, establish or mention that the trail can be located anywhere within the right-of-way. The forest has the authority to prescribe trail management in compliance with FSH 1909.12, chapter 20, section 24.43(1)(b).

The forest's management approach as described in the National Trails section of chapter 3 of the plan (pp. 151-152) provides programmatic protection and management of the nature and purposes of the Arizona National Scenic Trail and complies with the National Trail System Act toward the same objectives. No further detailed analyses are required and would be beyond the scope of this plan.

The land management plan's National Trails Management Area direction complies with FSH 1909.12, chapter 20, section 22.4. Figure A-7 in appendix A of the plan shows the location of the Arizona National Scenic Trail.

Instructions

None.

National Trails Management Area Plan Components and Mining

Objection Summary

Pinto Valley Mining Corporation and the Arizona Mining Association question the legal authority of multiple National Trails Management Area plan components, including NTMA-S-03, NTMA-G-10, and NTMA-G-12, that they allege conflict with existing mining facilities, as well as mining exploration and development.

First, they contend that the Arizona National Scenic Trail comprehensive management plan has legal authority to designate an Arizona National Scenic Trail corridor as one-half mile from the centerline of the trail and restrict activities within the corridor, rather than the land management plan. The objectors think that the forest's justification that guidelines provide flexibility for departure is not sufficient.

They also claim that the land management plan's description of the Arizona National Scenic Trail corridor as having views of natural-appearing landscapes and conserving scenic and natural resources is unattainable because the trail is within historic mining and planned mine expansion areas.

Lastly, they state that the forest did not coordinate the scenic trail's management prescriptions as described in the planning rule at 36 CFR 219.4(b)(1):

> *The responsible official shall coordinate land management planning with the equivalent and related planning efforts of federally recognized Indian Tribes, Alaska Native Corporations, other Federal agencies, and State and local governments.*

The objectors contend that this should have occurred with the Arizona State Land Department and Gila County due to the potential future impacts on state lands and the economic and energy development within Gila County.

Objectors' Proposed Remedies

- Remove NTMA-DC-06 and NTMA-DC-07 until the Arizona National Scenic Trail comprehensive plan is finalized.
- Remove NTMA-S-03, NTMA-G-10, and NTMA-G-12.
- Remove NTMA-G-03 as it is contrary to mining law and regulations and road crossings over national trails, if needed for mining, should be allowed.
- Change NTMA-MA-07 from a management approach to a standard; and
- Change the description of the Arizona National Scenic Trail corridor in the plan.

Assessment

Plan content referenced by the objector includes:

- *NTMA-DC-06: The Arizona National Scenic Trail and corridor are well-defined and provide high-quality, primitive hiking, mountain biking, equestrian opportunities, and other compatible nonmotorized trail activities. The significant scenic, natural, historic, and cultural resources within the trail's corridor are conserved. The trail provides visitors with expansive views of the natural-appearing landscapes.*

- *NTMA-DC-07: Scenery viewed from the Arizona National Scenic Trail is consistent with high or very high scenic integrity objectives. The foreground of the trail is natural-appearing.*
- *NTMA-S-03: Sales or extraction of mineral materials (e.g., limestone and gravel) shall not be authorized within the Arizona National Scenic Trail corridor.*
- *NTMA-G-03: Construction of new motorized routes should not intersect national trails located within primitive or semiprimitive nonmotorized recreation opportunity spectrum classes. Management activities should maintain public access to designated national trails.*
- *NTMA-G-10: Linear utilities and rights-of-way should not be constructed over national trails. Where unavoidable, these should be limited to a single Arizona National Scenic Trail crossing per special use authorization to maintain the integrity of the trail corridor and values for which the Arizona National Scenic Trail was designated.*
- *NTMA-G-12: To protect scenic integrity, special use authorizations for new communication sites, utility corridors, and renewable energy sites should be avoided. Where unavoidable, design elements should be implemented to maintain scenic integrity in the trail corridor and the values for which the Arizona National Scenic Trail was designated.*
- *NTMA-MA-07: Use the most recent version of the Arizona National Scenic Trail Comprehensive Plan when considering projects in the Arizona National Scenic Trail corridor.*

Legal authority of plan components

The objectors contend that the Arizona National Scenic Trail comprehensive plan, not the Tonto's land management plan, is the "…delegated authority related to the acquisition, management, development, and use of the trail." The objectors did not provide a citation for this statement, and it is unclear how the objectors come to this conclusion.

FSH 1909.12, chapter 20, section 24.43(1)(b) requires that plans reference identified national trail rights-of-way, if established (which has not been established for the Arizona National Scenic Trail at the time), or otherwise may identify a corridor or geographic area around the trail or use other means to identify where trail management direction applies.

The National Trails System Act at 16 USC 1244(d) directs the Secretary to establish an advisory council within one year of designation. However, the same section of the act also states, "If the appropriate Secretary is unable to establish such an advisory council because of the lack of adequate public interest, the Secretary shall so advise the appropriate committees of the Congress." In 2019, the secretary terminated the Arizona National Scenic Trail Advisory Council with a memorandum, stating that the purposes of the council can be fulfilled by "…ongoing coordination and collaboration among the Federal Agencies, State, local government and private interests." Executive Order 13875 directed agencies to evaluate, improve, or streamline the utility of federal advisory committees. Section (b) of the order directs agencies to terminate at least one-third of committees established under the Federal Advisory Committee Act (FACA), including committees for which the:

i. stated objectives of the committee have been accomplished; and
ii. subject matter or work of the committee has become obsolete; and
iii. primary functions have been assumed by another entity; or
iv. agency determines that the cost of operation is excessive in relation to the benefits to the federal government.

The secretary's memorandum documents the consideration and application of (i), (iii), and (iv) as reasons for the secretary's decision to terminate the Arizona National Scenic Trail Advisory Council.

Coordination with Arizona State Land Department and Gila County

The planning record documents the forest's outreach, coordination, and written communication from and with Gila County at each planning phase. The record also shows that the Arizona State Land Department submitted a comment letter that expressed general support for the plan revision process and suggested plan components to incorporate into the final plan (final EIS, volume 3, p. 80, comment 2809-1). Neither the Arizona State Land Department nor Gila County objected on their own behalf regarding this concern.

The National Trails System Act provides a definition of "National Scenic Trails" at 16 USC 1242(a)(2):

> *National scenic trails, established as provided in section 1244 of this title, which will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. National scenic trails may be located so as to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms which exhibit significant characteristics of the physiographic regions of the Nation.*

It also describes the Arizona National Scenic Trail at 16 USC 1244(a)(27)(A):

> *The Arizona National Scenic Trail, extending approximately 807 miles across the State of Arizona from the U.S.–Mexico international border to the Arizona–Utah border, as generally depicted on the map entitled "Arizona National Scenic Trail" and dated December 5, 2007, to be administered by the Secretary of Agriculture, in consultation with the Secretary of the Interior and appropriate State, tribal, and local governmental agencies.*

The plan describes the Arizona National Scenic Trail on page 152:

> *The Arizona National Scenic Trail stretches over 800 miles across Arizona from Mexico to the Utah border, showcasing the State's diverse vegetation, wildlife, wilderness, and scenery, and providing unparalleled opportunities for hikers, mountain bikers, equestrians, and other nonmotorized trail users. The Omnibus Public Land Management Act of 2009 (P.L. 111-11) amended the National Trails System Act (P.L. 90-543) to designate the Arizona Trail as a national scenic trail. The Arizona National Scenic Trail corridor is defined as approximately 0.5 miles from the centerline of the trail. The Tonto National Forest manages about 200 miles of the Arizona National Scenic Trail on the Globe, Mesa, Tonto Basin, and Payson Ranger Districts.*

Conflict with mining

The National Trails System Act directs that "…efforts shall be made to avoid activities incompatible with the purposes for which the trail was established."

The plan components and management approach the objectors are concerned are applicable to the entire National Trails Management Area, as defined in FSH 1909.12, chapter 20, section 22.1, whether there is a mineral potential or not. Guidelines are specifically written for flexibility in defining compliance, if the purpose of the guideline is met (FSH 1909.12, chapter 20, section 22.14). Guidelines

allow deviation for projects without requiring a project-specific plan amendment (36 CFR 219.15). Plan components are also subject to valid existing rights. The *Minerals Regulations* section of this response provides additional details.

The land management plan on page 129 states that special management areas represent a management emphasis for an area or several similar areas on the landscape. As the forest explained in the response to comments (final EIS, volume 3, p. 212, comment 2816-87):

> *…Balancing conflicting resource needs and providing for comprehensive multi-use management, consistent with the conservation ethic, is a continuous objective in administering the resources of the Tonto National Forest and setting a standard that limits where common variety minerals are obtained in recommended wilderness areas is consistent with managing for multiple use and the sustained yield of forest resources and follows authority provided in regulations at 36 CFR 228 Subpart C, for the disposal of mineral materials…*

It is within the authority of the responsible official to use the land management plan to determine if disposal of mineral materials in special management areas, such as the Arizona National Scenic Trail and the National Trail Management Area, would be detrimental to the general public interest and unique characters of the area.

Conclusion

I find that the forest has met the planning rule requirements for the planning, management, and administration of the Arizona National Scenic Trail because it is within the forest supervisor's authority to prescribe trail management in compliance with FSH 1909.12, chapter 20, section 24.43. The description of the Arizona National Scenic Trail corridor in the plan is sufficient and consistent with the National Trails System Act and the record demonstrates that both Gila County and the Arizona State Land Department have been informed about each step of the plan revision process and have been engaged throughout plan development. Finally, the national trail management area plan components cited by the objectors would not unreasonably prohibit or hinder operators right to prospect, explore, and mine for locatable minerals.

Instructions

None.

Arizona National Scenic Trail Advisory Council

Objection Summary

Freeport-McMoRan is not satisfied with the forest's response to comment regarding the forest's coordination with the group leading the development of the Arizona National Scenic Trail Comprehensive Management Plan and is concerned with the modifications that were made to the draft plan's NTMA-MA-05 (NTMA-MA-01 in the final plan), as well as the final plan's NTMA-MA-05 and NTMA-MA-06. The objector is concerned with these three management approaches because:

1. The forest has not appointed anyone to the Arizona National Scenic Trail Advisory Council; and
2. The forest has not "properly consulted" with the council; and

3. The forest has not clarified who the "group" is the forest will be coordinating management of the Arizona National Scenic Trail; and
4. The trail's comprehensive plan has not been developed with input from the advisory council.

The objector alleges that the plan components related to visual quality and other management activities in the Arizona National Scenic Trail are premature and arbitrary.

Objector's Proposed Remedies

None provided.

Assessment

The plan content referenced by the objector includes:

- *NTMA-MA-01: Work with volunteer groups, private and non-profit partners, local governments, and adjacent landowners to manage and maintain national trails for the purposes for which they were established.*
- *NTMA-MA-05: Work with partners and volunteers to remove unauthorized structures and restore the trail to established trail management objectives.*
- *NTMA-MA-06: Work with partners and volunteers to discourage unauthorized trail construction and reconstruction.*

Management approaches describe an approach or strategy to help achieve desired conditions. They are not planning direction and therefore not binding (36 CFR 219.7(f)(2); FSH 1909.12, chapter 20, section 22.4). This management approach helps move towards a desired future condition for the Arizona National Scenic Trail and plan.

Objections specific to the requirement of the advisory council are beyond the scope of the land management plan as the Secretary of Agriculture terminated the Arizona National Scenic Trail Advisory Council in a 2019 memorandum. The plan has no effect on the secretary's decision, nor can the forest make appointments to the advisory council. There had never been appointments made to the advisory council since the Arizona National Scenic Trail was added to the National Trails System in 2009.

Among the rationale for terminating the advisory council is Executive Order 13875, which directs executive agencies to:

> *…evaluate the need for each of its current federal advisory committees and to terminate at least one-third of committees established under section 9(a) (2) of the Federal Advisory Committee Act (FACA) which [the United States Department of Agriculture has the discretion to continue or terminate.*

The 2019 memorandum also states:

> *The Forest Service has carefully reviewed the cost and effort of retaining the Council and given that the purposes of the Council have either been fulfilled previously or can be fulfilled by ongoing coordination and collaboration amongst the Federal Agencies, State, local government and private interests, the Forest Service recommends the termination of the Council, as is permissible under the National Trails System Act.*

Page 2, paragraph 2 of the memorandum documents the history whereby, “The Forest Service was unable to generate enough interest in the Council to supply sufficient candidates for appointment of Council members.”

Conclusion

I find that the forest is consistent with guiding regulation and policy with respect to NTMA-MA-01, NTMA-MA-05, and NTMA-MA-06 in the final plan.

Instructions

Add the 2019 memorandum terminating the Arizona National Scenic Trail Advisory Council to the planning record.

SCENERY

Scenery and Mining

Objection Summary

Freeport-McMoRan and Arizona Mining Association object to multiple new or modified scenery related plan components because they are vague, broad, burdensome, and costly. Freeport- McMoRan specifically objects to use of the term “scenic integrity objectives” and the scenery management system.

Additionally, the objector asserts that these new terms should not be in the plan because the links cited in the plan are incorrect and do not provide direction to correct information.

The objector, Arizona Mining Association is particularly concerned about SC-DC-05 and SC-G-03, they allege the following:

- the components fail to consider the capability of historic and current mining areas; and
- the components may be inappropriate in these areas; and
- the components conflict with 36 CFR Part 228, which recognizes that mining may impact scenery; and
- 36 CFR 228.8(d) already addresses scenery management needs.

The plan content referenced by the objector includes SC-DC-01; SC-DC-05; SC-G-01; SC-G-03; SC-MA-02; SC-MA-04; RWMA-G-10; and IRAMA-G-02.

Objector’s Proposed Remedies

Freeport-McMoRan:

- Remove the new scenery components and modifications to the scenery components.
- Remove the term "scenic integrity objectives" from the plan.

Arizona Mining Association:

- Remove SC-DC-05 and SC-G-03 or clarify in the plan that these two components do not apply to mining operations.

Assessment

The plan content referenced by the objector includes:

- *SC-DC-01: The forest contains a variety of landscapes representing the desired scenic character[35] that contributes to visitors' sense of place and connection with nature.'*
  [35]*Desired scenic character descriptions can be found on the Tonto National Forest website under Scenery at:* https://www.fs.usda.gov/detail/tonto/landmanagement/resourcemanagement/?cid=fsbdev3_018770.
- *SC-DC-05: Scenery is managed for present and future generations, is resilient to changing conditions, and supports ecological, social, and economic sustainability on the forest and in surrounding communities.*
- *SC-G-01: Management activities and newly constructed features (e.g., facilities and infrastructure) should minimize visual disturbances and be consistent with or move the area towards achieving scenic integrity objectives[36] (as defined in the Scenery Management System, or similar protocol).*
- *SC-G-03: Management activities that result in short-term impacts inconsistent with the scenic integrity objectives, as defined in the scenery management system or similar protocol, should achieve, or move the project towards, the scenic integrity objectives over the long-term.*
- *SC-MA-02: Consider setting priorities for rehabilitation of areas where existing scenic integrity is below the scenic integrity objective (as defined in the Scenery Management System, or similar protocol).*
- *SC-MA-04: Make the scenery management inventory and scenic integrity objective maps available to neighboring land management agencies, State agencies, communities, other partners, and the public for consideration in their projects and plans.*
- *RWMA-G-10: Management activities in recommended wilderness areas should meet scenic integrity objectives of high or very high in the long term, as defined in the Scenery Management System or similar protocol.*
- *IRAMA-G-02: Management activities should be consistent with the scenic integrity objectives, or similar protocol.*

Use of the term "scenic integrity objectives" and the scenery management system

The scenery management system is the established framework identified by FSH 1909.12, chapter 20, Section 23.23f for developing plan components related to scenic character, unless an exception is established per FSM 1900, chapter 1920, section 1921.03(2)(c). This scenery management framework is described in *Landscape Aesthetics: A Handbook for Scenery Management*. The forest's website has a page on the scenery management system[4], in which *Landscape Aesthetics: A Handbook for Scenery Management*[5] is referenced and linked. This document describes scenic integrity as one of the basic premises of scenery management (p. 32) and pages 2-2 to 2-7 define and discuss scenic integrity and scenic integrity levels.

The *Scenic Integrity Objectives Process Paper* (planning record 2461) explains the change from using the visual management system to the scenery management system, and why the term "visual quality objectives" was changed to "scenic integrity objectives."

[4] https://www.fs.usda.gov/detail/tonto/landmanagement/planning/?cid=stelprdb5412120

[5] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5412126.pdf

Use of desired scenic character and definitions of terms

The desired condition expresses the current and future scenic character of the landscape and expresses the need to protect this resource. While this plan component is general, the purpose is not to identify a need or a process for scenery regarding mining activity. The desired condition is not a guideline or management approach.

FSH 1909.12, chapter 20, section 23.23f states (p. 105) that a plan:

> *Must include a description of desired scenic character based on the scenery management system, unless an exception is established pursuant to FSM 1921.03. Desired scenic character may be different from existing or potential scenic character identified in the assessment. Depending on the biophysical and cultural attributes of the plan area's landscape, there may be multiple desired scenic character descriptions associated with specific areas.*

FSH 1909.12, chapter 20, section 23.23f states that, "Desired conditions may also describe scenic stability, sustainability, and other measures used in scenery management system."

SC-DC-05

SC-DC-05 is a desired condition for management to strive towards; it does not provide specific project-level management direction (FSH 1909.12, chapter 20, section 22.11). Future, specific proposed mining projects or activities would be subject to the NEPA process, during which scenery management for that project/activity would be specifically addressed.

As stated in the final plan on page 12:

> *Desired conditions are specific social, economic, and ecological conditions of the forest plan area, or a portion of the forest plan area, that are described in terms specific enough to allow for progress toward their achievement. Desired conditions are what drive the plan. All project-level management activities should be aimed at the achievement of the desired conditions for those resources in the area where the project is located. Desired conditions can be thought of as vision statements that help define a collective vision for the national forest in the future (36 CFR 219.7(e)(1)(i)…Desired conditions help frame the purpose and need during project-level planning. Desired conditions are not commitments or final decisions approving projects and activities. The desired conditions for some resources may currently exist, but for other resources they may only be achievable over a long period of time.*

The planning rule requires that a plan must include plan components, including desired conditions and guidelines, to provide for scenic character (36 CFR 219.10(b)(1)(i)). When developing plan components, the responsible official shall consider scenic character (36 CFR 219.8(b)(2)) and consider aesthetic values, geologic features, scenery, and viewsheds (36 CFR 219.10 (a)(1)).

SC-G-03

SC-G-03's direction is consistent with direction from the FSH 1909.12, chapter 20, section 23.23 (f)(2)b), which states that plans:

> *Should contain standards or guidelines as needed to avoid or mitigate undesirable effects incompatible with desired scenery conditions. Standards or guidelines can also apply to specific scenic integrity objectives, management areas, geographic areas, designated areas or other identified special areas or places. Standards and guidelines can be applied at multiple scales to specific management activities such as timber harvest, utility corridors, trail construction, facility development, or road construction.*

36 CFR 228.8(d) states:

> *[The o]perator shall, to the extent practicable, harmonize operations with scenic values through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements which blend with the landscape.*

The desired scenery objectives maps for the alternatives (final EIS, volume 1, chapter 3, scenery section), show the current and partial historic mining areas with a "very low" scenic integrity objective classification. In the environmental effects discussion, the forest noted that the Forest Service does not manage for very low scenic integrity objectives (final EIS, volume, 1, p. 230). To clarify, existing "very low" scenic integrity areas will be allowed to remain in place and scenery improvements may occur in these areas, consistent with 36 CFR 228.8(d), the *Landscape Aesthetics: A Handbook for Scenery Management* (USDA 1995), and the *National Scenery Management System Inventory Mapping Protocol*. However, no new "very low" scenic integrity objectives areas will be designated, consistent with the planning rule (36 CFR 219.10) and scenery management direction in FSM 1921.03.

SC-MA-02 and SC-MA-04

The objector wants "below the scenic integrity objective" to be removed from SC-MA-02, and SC-MA-04 to be removed from the plan because the plan uses terms that are not defined in the regulations. They also state that this management approach would cause confusion and errors in implementation.

Management approaches do not offer plan direction and are not required components, but rather describe a strategy the forest may follow to move towards a desired condition.

FSH 1909.12, chapter 20, section 23.23f (p. 105) states that plans:

> *Should contain standards or guidelines as needed to avoid or mitigate undesirable effects incompatible with desired scenery conditions. Standards or guidelines can also apply to specific scenic integrity objectives, management areas, geographic areas, designated areas or other identified special areas or places. Standards and guidelines can be applied at multiple scales to specific management activities such as timber harvest, utility corridors, trail construction, facility development, or road construction.*

SC-MA-02 is a management approach that follows handbook direction as it would identify priority areas for rehabilitation, consistent with FSH 1909.12, chapter 20, section 23.23f.

SC-MA-04 does not create a blockade or burdens for projects outside of National Forest System lands. It will make the scenic management inventory and scenic integrity maps available to the public for their consideration.

Conclusion

I find that the final EIS and final plan were appropriately updated using the required framework for scenery under the scenery management system. This change was documented in *20220914 Desired SIO Process Paper*. The scenery management system requires the change of terms that the objector is concerned with. Accordingly, it is appropriate for the forest to use the term "scenic integrity objectives" instead of "visual quality objectives."

I find that SC-DC-05 and SC-G-03 are consistent with direction from the FSH 1909.12, chapter 20, the planning rule (36 CFR 219.10(b)(1)(i)), and 36 CFR 228.8(d). Both SC-DC-05 and 36 CFR 228.8(d) provide for managing scenery for current and future generations, while supporting ecological, social, and economic sustainability.

Instructions

Add the *National Scenery Management System Inventory Mapping Protocol* to the planning record.

SPECIAL DESIGNATED AREAS

State Authority

Objection Summary

Arizona Game and Fish Commission alleges that the forest encroaches on state wildlife management authority by recommending special land designations in the plan and ROD, including recommended wilderness and eligible Wild and Scenic River segments. The commission is concerned that restrictions on access and recreational opportunities will adversely impact their ability to manage resources. The commission also takes issue with other already designated areas in Arizona, such as national monuments, national wildlife refuges, national conservation areas, areas of critical environmental concern, wild and scenic rivers, and areas with wilderness characteristics.

Objector's Proposed Remedy

None provided.

Assessment

Per the planning rule, forests are required to inventory and evaluate lands and rivers that may be appropriate for inclusion in the National Wilderness System and the Wild and Scenic River system and determine whether to recommend them for designation (36 CFR 219.6(b)(15) and 36 CFR 219.7(c)(2)). Land management plans are also required to establish plan components, including standards and guidelines, that provide for protection of designated and recommended wilderness and wild and scenic rivers, and management of other designated or recommended areas, such as research natural areas, and maintain the special characteristics that otherwise support such a designation (36 CFR 219.10(b)(1)).

Congress has authority over federal lands pursuant to the United States Constitution and has directed the Forest Service to manage national forests pursuant to the Organic Act of 1897 and other federal statutes. The Forest Service cooperates with state and other agencies in wildlife protection (36 CFR 241.1) and wildlife management (36 CFR 241.2) on national forests. Forest Service regulations regarding

the management of wilderness do not affect the jurisdiction or responsibility of States with respect to wildlife and fish in national forests (36 CFR 293.10).

Conclusion

I find the planning record and plan are consistent with applicable law, regulation, and policy. The plan contains recommended wilderness and wild and scenic river areas, as well as associated plan components. The recommendation and management of these areas would not hinder the forest's ability to cooperate with the state in wildlife protection and management, nor would it affect jurisdiction or responsibility of states with respect to wildlife and fish management on National Forest System lands.

Instructions

None.

Expansion of Special Designated Areas

Objection Summary

Freeport-McMoRan objects to expansion of special area designations, such as the Lakes and Rivers Management Area, Saguaro Wild Bill Burro Management Area, Salt River Horse Management Area, Apache Leap Special Management Area, proposed research natural areas, and recommended botanical areas that they allege may have restrictions on mining activities.

They argue that:

> *An overlay of all these designated, recommended, and eligible areas and features of the forest encompasses much of the forest and can greatly restrict other multi-use activities. Furthermore, much of these designations and/or acreage are new to the plan; and as such, Freeport was not afforded an opportunity to officially comment previously on the new designations and acreage.*

Objector's Proposed Remedy

None provided.

Assessment

Multiple use of national forests is required by both the Multiple-Use Sustained-Yield Act and the planning rule (36 CFR 219.1(b)). While there is no minimum or maximum acreage for the establishment or recommendation of management areas or geographic areas, the planning rule requires that "every plan must have management areas or geographic areas or both. The plan may identify designated or recommended designated areas as management areas or geographic areas," (36 CFR 219.7(d)).

Management areas and geographic areas, as well as other established and recommended designated areas, are vital tools in the development of a land management plan to provide management direction and protection to a resource or area. Recommended areas, such as recommended wilderness and recommended wild and scenic rivers, do not have official designations; rather, they require further review and official designation by Congress. Until that time, a forest is required to establish plan components to maintain the characteristics which made an area eligible for recommendation.

The forest explained their rationale and process for determining the management areas in the plan in the response to comments (final EIS, volume 3, p. 106, comment 2816-86). Though not comprehensively, many of the management areas identified in the final plan were also identified and available for public comment in the draft plan.

Mining activities will continue to be administered in accordance with the General Mining Act of 1872 (30 USC 22-42), as well as 36 CFR Part Part 228, Subpart A. Similarly, FSH 1909.12, chapter 20, section 22.1 states that plan components "[m]ay not interfere with statutory or valid existing rights."

Conclusion

I find that the forest's designation of management areas is consistent with the requirements of the planning rule (36 CFR 219.7(d)), as demonstrated in the planning record.

Instructions

None.

Sierra Ancha Experimental Forest

Objection Summary

Sierra Club et al. assert that grazing should be prohibited in the Sierra Ancha Experimental Forest under the revised land management plan as it was prohibited in the 1985 forest plan and point out that the draft EIS (volume 2, p. 243) stated that "livestock grazing is not compatible with the Experimental Forest…permitting livestock grazing would go against the desired conditions of the area…" They also do not agree that the decision to authorize grazing is outside the scope of the land management plan and contend that the forest should provide an analysis of how grazing will affect the Sierra Ancha Experimental Forest.

Objectors' Proposed Remedy

Revise the plan to prohibit livestock grazing in the Sierra Ancha Experimental Forest and all other long-vacant allotments.

Assessment

The forest first established research plots in Sierra Ancha in 1925. The research area was named the Parker Creek Experimental Forest in 1932, with a research focus on watershed management. This experimental forest was expanded and renamed the Sierra Ancha Experimental Forest in 1938. The *1938 Sierra Ancha Experimental Forest Establishment Report* (planning record 2338) and the *1983 Sierra Ancha Experimental Forest 5-year Report* (planning record 2200) state that most, but not all, of the experimental forest has been withdrawn from grazing. The establishment report also states that the forest "will have administrative control of grazing use on the proposed addition." The proposed addition is the area that was added to the experimental forest in 1938.

The Sierra Ancha Experimental Forest was assigned management area "5E" in the 1985 forest plan. The plan (p. 161) did not allow grazing in this management area, but it did not include discussion or rationale for why the area was closed to grazing.

The Sierra Ancha Experimental Forest was designated as a specific management area in the 2019 draft revised land management. Under this management area, the 2019 draft plan states, "Livestock grazing is not authorized in the Sierra Ancha Experimental Forest or in experimental plots, except at locations currently associated with existing term grazing permits (in conjunction with existing fence lines and natural boundaries in order to maintain neighboring allotment boundary divisions)," (p. 153).

The Sierra Ancha Experimental Forest Management Area was removed between the 2019 draft version of the revised land management plan and 2022 final version of the land management plan. The draft ROD and the final EIS state:

- *This land management plan covers all the National Forest System lands within the Tonto National Forest boundary, excluding the Sierra Ancha Experimental Forest which is managed by the Rocky Mountain Research Station.* (Draft ROD, p. 2).
- *Analysis of the Sierra Ancha Experimental Forest has been removed from alternatives B, C, and D because it is managed by the Rocky Mountain Research Station and is not within the scope of the plan revision process. This area no longer has management direction included within the Tonto National Forest land management plan.* (Draft ROD, p. 27; final EIS, volume 1, p. 20)
- *The Sierra Ancha Experimental Forest is surrounded by Tonto National Forest lands. It is an administratively designated area managed by the Rocky Mountain Research Station and is not included in this plan.* (Draft ROD, pp. 34-35; final EIS, volume 4, p. 129.)
- *Direction for the Sierra Ancha Experimental Forest has been determined to be outside the scope of this plan revision process*. (Final EIS, volume 3, p. 163, concern 180.)

The 2022 plan does not state if grazing is permitted in the Sierra Ancha Experimental Forest. The draft ROD explains that the experimental forest is managed by the Rocky Mountain Research Station, it is outside of the scope of the plan to determine if grazing will or will not occur.

Additionally, the forest disclosed the effects that may occur to long vacant allotment from the alternatives in the final EIS (e.g., pp. 144 and 146-150). The draft ROD (p. 15) also recognized that:

> *The land management plan also incorporates an objective to evaluate vacant allotments for the best future use including conversion to forage reserves to improve resource management flexibility; grant to current or new permitted livestock producer; or close to permitted grazing, in whole or in part.*

The draft ROD also disclosed that "the alternatives include a range of options on how to deal with vacant and understocked allotments that could increase or decrease grazing numbers," (p. 32).

Conclusion

I find the planning record does not provide clear rationale for why the 2019 draft plan permitted grazing in certain areas that was prohibited under the 1985 forest plan and why the Sierra Ancha Experimental Forest was removed between the draft and final versions of the plan. There is also no discussion on how the Sierra Ancha Experimental Forest will be managed if it is not included in the final plan and whether or not grazing will be permitted.

I find that the forest considered effects that may occur to long vacant allotments, as documented in the final EIS and ROD.

Instructions

- Provide a rationale in the ROD on why the Sierra Ancha Experimental Forest was removed between the draft and final version of the revised land management plan. Documentation should also include the reason for the change (e.g., new circumstances, new information, response to public comments) and should state whether the changes, new circumstances, or new information relevant to environmental concerns is or is not significant.
- Explain where the management objectives and/or management direction for the Sierra Ancha Experimental Forest can be found since management is under the Rocky Mountain Research Station, rather than the Tonto National Forest.

INVENTORIED ROADLESS AREAS

Roadless Rule Authority

Objection Summary

The Arizona State Association of 4 Wheel Drive Clubs assert that the forest should develop new alternatives that do not incorporate the 2001 Roadless Area Conservation Rule ("2001 roadless rule"; 36 CFR Part 294) direction because the rule has not been codified by Congress nor adjudicated. As an example, the objector states that non-motorized recreation opportunity spectrum designations made because an area is designated as a roadless area should be re-analyzed. The objector claims that the roadless rule is not based on "clear congressional authorization", as demonstrated in a recent ruling from West Virginia et al. versus Environmental Protection Agency et al. Therefore, new implementation of the rule, such as with the land management plan, is vulnerable to roadless rule legal challenges.

Objector's Proposed Remedy

Develop new alternatives that do not incorporate roadless rule direction.

Assessment

Land management plans must comply with all federal laws and regulations. The 2001 roadless rule is contained in Forest Service regulations at 36 CFR Part 294 (2001). While the 2001 roadless rule has been upheld in multiple lawsuits, it is not necessary that it be adjudicated to be valid. Nor is it necessary for Congress to codify the 2001 roadless rule in statute. The Supreme Court's decision in *West Virginia v. EPA*, 142 S.Ct. 2587 (2022), is not applicable. Congress explicitly granted the Forest Service, through the Secretary of Agriculture, broad authority to manage and regulate National Forest System lands under the Organic Administration Act of 1897, which states:

> *The Secretary of Agriculture shall make provisions for the protection against destruction by fire and depredations upon the public forests and national forests…he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use to preserve the forests from destruction.*

The authority to promulgate the 2001 roadless rule, which was done through a formal rulemaking process in accordance with the Administrative Procedures Act, is within the authority granted by Congress under the Organic Act and subsequent statutes that direct the Forest Service to protect and

manage the forests, including the National Forest Management Act and Multiple-Use Sustained-Yield Act.

Additionally, the objector is concerned with non-motorized recreation opportunity spectrum designations that the forest made because an area is designated as a roadless area. An area's recreation opportunity spectrum was designated to match the management emphasis of the area, as outlined in the *recreation opportunity spectrum whitepaper* (planning record 2460). Therefore, a non-motorized recreation opportunity spectrum would be in alignment with roadless area direction. It should also be noted that the forest did not add additional roadless areas during the revision process; recreation opportunity spectrum updates made for existing roadless areas would serve to bring the recreation opportunity spectrum in alignment with roadless area direction.

The objector's proposal that the forest develop an alternative that does not incorporate the 2001 roadless rule would not be compliant with the 2001 roadless rule and is not a requirement of the planning rule. Also, as FSH 1909.12, chapter 20, section 24.44 states, "Roadless areas designated under a roadless rule may be, but are not required to be, identified as unique management areas in a plan." It also directs responsible officials, when developing plan components that apply to designated roadless areas, to acknowledge and ensure that plan components are compatible with the management restrictions associated with the designated roadless areas.

Conclusion

I find that the forest appropriately adhered to the 2001 Roadless Area Conservation Rule in the revision of the plan and the final EIS. The responsible official designated recreation opportunity spectrum settings appropriately, in alignment with the rule.

Instructions

None.

Inventoried Roadless Areas Management Area Standard 2

Objection Summary

Freeport-McMoRan objects to IRAMA-S-02 because the standard is new to the plan and "will be applied in an overly broad, arbitrary, and capricious interpretation or application and be overly costly and burdensome."

Objector's Proposed Remedy

Delete IRAMA-S-02.

Assessment

The plan component referenced by the objector includes:

> *IRAMA-S-02: A road shall not be constructed or reconstructed in an inventoried roadless area, unless the responsible official determines that a road is needed according to the circumstances allowed in the Roadless Rule.*

Per FSH 1909.12, chapter 20, section 24.44, responsible officials shall ensure that plan components applicable to roadless areas designated under a roadless rule "are compatible with the applicable roadless rule. The plan can have different plan components in multiple management areas or geographic areas apply to the inventoried roadless areas as long as these plan components are compatible with the restrictions of the applicable roadless rule," (p. 134).

IRAMA-S-02 reflects the 2001 Roadless Area Conservation Rule's ("2001 roadless rule"; 36 CFR Part 294 (2001)) requirements at 36 CFR 294.12 (2001); it does not change where road construction or reconstruction requirements, prohibitions, and exceptions in a roadless area would apply.

IRAMA-S-02 is not new to the plan. It has been modified between the draft and final versions of the plan. The draft plan's version of the standard stated:

> *A road shall not be constructed or reconstructed in an IRA, unless the responsible official determines that a road is needed according to the circumstances allowed in the 2001 Roadless Rule (36 CFR § 294.12) and the road construction has been approved by the appropriate review.*

Changes to a proposed action may occur between a draft and final EIS. Changes may occur due to new circumstances, new information, or in response to comments received on the draft EIS. If changes to the proposed action or new circumstances or information relevant to environmental concerns is not significant, the agency need not prepare a supplement (40 CFR 1502.9(d)(4)). Volume 1 of the final EIS disclosed that changes to plan components occurred between the draft and final versions and provided a rationale for these changes and planning record 2494 shows track changes made to the draft plan.

Conclusion

I find that IRAMA-S-02 is consistent with the planning rule (36 CFR Part 219) and the 2001 Roadless Area Conservation Rule. The modification of IRAMA-S-02 between the draft and final versions of the plan is not significant, consistent with 40 CFR 1502.9(d)(4).

Instructions

None.

WILDERNESS AND RECOMMENDED WILDERNESS

Designated Wilderness Desired Conditions

Objection Summary

Freeport-McMoRan objects to designated wilderness desired conditions DWMA-DC-05 and DWMA-DC-11. The objector is concerned that the second sentence of DWMA-DC-05 ("*Actions and structures that manipulate the biophysical environment are rare or nonexistent*") and DWMA-DC-11 will create an "overly broad, arbitrary, and capricious interpretation or application." The objector is also concerned that that they did not have an opportunity to comment on the second sentence of DWMA-DC-05 nor DWMA-DC-11 because they were added to the plan between the draft and final versions.

Objector's Proposed Remedies

- Remove the second sentence of DWMA-DC-05.

- Remove DWMA-DC-11.

Assessment

The plan components referenced by the objector include:

- *DWMA-DC-05: The environment within a wilderness is essentially unmodified. Actions and structures that manipulate the biophysical environment are rare or nonexistent. Natural occurring scenery dominates the landscape.*
- *DWMA-DC-11: Cultural, historical, and geological features of value that are inherent to wilderness character are recognized as features of value to wilderness character.*

36 CFR 219.7(e)(1)(i) states that desired conditions are "description(s) of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed" and that they "must be described in terms that are specific enough to allow progress toward their achievement to be determined."

20201009 Tonto LMP Changes Between Draft & Final (planning record 2494) documents rationale for the addition of the second sentence in DWMA-DC-05 as necessary to clarify the first sentence of the desired condition. It also documents rationale for the addition of DWMA-DC-11 because many cultural resources within the wilderness areas would fit into the "other features of value" category of wilderness character.

The changes to these two desired conditions between the draft and final versions of the land management plan does not constitute a significant change to the intended management direction for designated wilderness areas. Therefore, it does not require supplemental EIS (40 CFR 1502.9(d)(4)).

Conclusion

I find the forest met the requirements of the planning rule for the development of desired conditions to maintain the wilderness character in Congressionally designated wilderness areas (36 CFR 219.10(b)(1)(iv)). A supplemental EIS for the changes made to DWMA-DC-05 and DWMA-DC-11 is not required.

Instructions

None.

Recommended Wilderness Analysis and Rationale

Objection Summary

Freeport-McMoRan objects to the addition of five new recommended wilderness areas and the increase in acres of recommended wilderness between the draft plan and final plan.

Conversely, Sierra Club et al. would like more recommended wilderness areas included in the plan. They allege that the recommended wilderness inventory and evaluation was arbitrary and capricious, specifically alleging livestock grazing and motorized recreation factors. Sierra Club et al. also asserts the forest did not provide enough explanation of why only the Coronado Mesa and Gun Creek recommended wilderness areas from the eleven listed in the preferred alternative in the draft plan were

included in the final plan. They also assert that the forest did not include a reasonable range of alternatives for recommended wilderness.

Objectors' Proposed Remedies

Sierra Club et al.:

- Prepare a supplemental draft EIS with an updated wilderness inventory and evaluation.
- Revise the final EIS and draft ROD to include specific rationale for why the nine recommended wilderness areas that were included in the draft EIS were dropped from the final EIS; or, re-add the nine recommended wilderness areas that were dropped.
- Revise recommended wilderness boundaries to 1) exclude improvements along cherry stems and other features incompatible with wilderness character; 2) reflect on-the-ground verification of geospatial data boundaries; and 3) include boundary modifications to improve manageability of the recommended wilderness areas.

Freeport-McMoRan:

None provided.

Assessment

New recommended wilderness acreage

There were no new areas included in the decision that had not been previously documented and available for comment. Appendix D of both the draft EIS and final EIS also documents that the recommended wilderness areas identified within the draft ROD were all evaluated for eligibility in either alternative B or C.

The draft ROD includes a combination of recommended wilderness area polygons from each of the two alternatives. The final EIS and draft ROD also show that several recommended wilderness polygons from the draft EIS were split upon removal of Bureau of Reclamation withdrawn lands. For example, Polygon 119d Red Creek was not previously identified as an individual polygon in the draft EIS, but it was included in the draft ROD as a recommended wilderness area.

The responsible official has the authority to identify which specific areas, or portions thereof, from the evaluation to carry forward as recommended wilderness in one or more alternatives in the plan's environmental impact statement (FSH 1909.12, chapter 70, section 73). The draft ROD provides rationale for the recommended wilderness areas included in the decision.

Removal of recommended wilderness areas

FSH 1909.12, chapter 70 outlines the wilderness recommendation process. The required documentation must be made available to the public, as required by section 70.61 of the handbook, and should be consolidated in an appendix to the applicable NEPA documents.

The draft ROD stated that the determination of recommended wilderness areas was informed by engagement with staff, local governments, tribes, and other stakeholders. The draft ROD also included a summary of additional considerations that informed the decision, including manageability, current uses consistent with wilderness designation, and value of the addition, if it were designated by Congress. The draft ROD states that:

> *Information considered in making this administrative recommendation for each area recommended for inclusion in the National Wilderness Preservation System is available in the*

final environmental impact statement volume 3, appendix A Response to Comments; and volume 4, appendix D. Wilderness Recommendation Process.

The plan revision's interdisciplinary team members also provided additional information on manageability and inconsistent uses to the responsible official after completion of the draft EIS, as documented in meeting notes. This informed the decision to adjustment recommended wilderness area polygons, remove nine recommended wilderness areas from the preferred alternative, and include three additional recommended wilderness areas from alternative C as recommended wilderness areas. These notes were not included in the planning record, nor is it clear if this information was integrated into the descriptions of recommended wilderness areas in the final EIS.

Wilderness inventory and evaluation

The forest responded to the objectors concerns about the wilderness inventory and evaluation process in the response to comments (final EIS, volume 3, pp. 188-190 (concern 211), p. 191 (concern 213), pp. 191-202 (concern 214), and pp. 206-208 (concern 217).

Consideration of improvements

Table 37 in appendix D of the final EIS (volume 4) described how the forest defined the improvement evaluation criteria. For example:

- "All [range] improvements that can be altered to appear more natural on the landscape will be carried forward to evaluation," (p. 100);
- "Existing non-motorized, mechanized (bike), or motorized trails, or any user created trails are included in the inventory. Trails are not considered to be a developed recreational improvement in the inventory criteria," (p. 101).

Boundary changes

Page 111 of appendix D of the final EIS (volume 4) documented that the forest made boundary adjustments to the recommended wilderness polygons to exclude features that would be inconsistent with wilderness characteristics during the evaluation process. The forest noted that public input was considered during these adjustments.

Consideration of cherry-stemmed roads

The forest showed consideration of cherry-stemmed roads as a factor for manageability (final EIS, volume 4, p. 121). The evaluation included polygons with cherry-stemmed roads ranked as high for the manageability, such as Polygon 101a Gun Creek and Polygon 32 Coronado Mesa, as well as opportunities for boundary adjustments to improve manageability by avoiding cherry stem roads.

Consideration of adjacent sights and sounds

Appendix D of the final EIS (volume 4) described the forest's inventory and evaluation process and documented how it aligns with FSH 1909.12, chapter 70. The forest evaluated the opportunities for solitude or for a primitive and unconfined type of recreation including, but not limited to, the pervasive sights and sounds from outside the area, along with other criteria as required by the handbook. The forest used a numerical evaluation process, which is described on pages 112-115 of appendix D. Appendix D summarizes the results of the analysis and includes rationale for why an area was recommended or not recommended (pp. 132-146, table 44).

Evaluation of plant and animal communities

FSH 1909.12, chapter 70, section 71.2(1) also provides direction on how to interpret and evaluate "apparent naturalness", including factors such as:

> *a. The composition of plant and animal communities. The purpose of this factor is to determine if plant and animal communities appear substantially unnatural (for example, past management activities have created a plantation style forest with trees of a uniform species, age, and planted in rows).*
>
> *b. The extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention; and*
>
> *c. The extent to which improvements included in the area (sec. 71.22 of this Handbook) represent a departure from apparent naturalness.*

The final EIS, volume 4, p. 117, table 40 includes the evaluation procedure and rationale. The evaluation procedure includes criteria for evaluating the composition of plant and animal communities as they "appear to the average forest visitor." The evaluations included assessment of how an average visitor might perceive plant and animal communities within various polygons.

Consideration of adjacency to other wilderness areas for solitude and primitive/unconfined recreation

FSH 1909.12, chapter 70 does not require consideration of a polygon's adjacency to designated wilderness when evaluating opportunities for solitude and opportunities for primitive and unconfined recreation. Section 72.1(2) of the handbook provides the following evaluation criteria for solitude and primitive and unconfined recreation:

> *a. Consider impacts that are pervasive and influence a visitor's opportunity for solitude within the evaluated area. Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area.*
>
> *b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature. Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature.*

The forest expanded upon the required criteria for opportunities for solitude to include additional factors, as shown in table 41 of appendix D of the final EIS.

The forest included consideration for how adjacent wilderness areas contributed to opportunities for solitude and primitive and unconfined recreation in their evaluation of the wilderness-contiguous polygons (appendix D of the final EIS). For example, the evaluation rationale for Polygon 18 states:

> *There are abundant opportunities for engaging in primitive and unconfined recreation and these opportunities are of high quality. Horseback riding, hiking, dispersed camping. No controls on user behavior. When used in conjunction with the adjacent wilderness, opportunities are high.*

This example was also provided in the forest's response to comments (final EIS, volume 3, pp. 195-196, comment 2970-548).

Bureau of Reclamation withdrawals

16 USC 1131(c) defines an area of wilderness as:

> *An area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation…*

FSH 1909.12, chapter 70, section 72.1 directs the agency to evaluate the degree to which an area may be managed to preserve its wilderness characteristics, including legally established rights or uses within the area.

The response to comments (final EIS, volume 3, pp. 206-208, concern 217) documents the forest's rationale for excluding Bureau of Reclamation withdrawals from recommended wilderness areas on the basis that future reclamation works would be inconsistent with management for protection of wilderness characteristics. The nonconforming uses of those withdraws are expected to be a dominant and pervasive character of the landscape and therefore inconsistent with wilderness character. The *BOR Withdrawn Areas* white paper (planning record 2031) further outlines decisions made for the removal of Bureau of Reclamation withdrawal areas from consideration for recommended wilderness areas, including specific changes for each affected polygon.

Range of alternatives for recommended wilderness

The forest considered a range of recommended wilderness areas from no recommended wilderness areas in alternatives A and D, to over 399,000 acres of recommended wilderness areas in alternative C. Per FSH 1909.12, chapter 70, section 73, "not all lands included in the inventory and subsequent evaluations are required to be carried forward in an alternative," (p. 13). Further, "based on the evaluation and input from public participation opportunities, the responsible official shall identify which specific areas, or portions thereof, from the evaluation to analyze as recommended wilderness in one or more alternatives in the plan's environmental impact statement (36 CFR Part 219, FSM 1920, and FSH 1909.15)," (p. 13).

Conclusion

I find that the forest completed the wilderness inventory and evaluation process consistent with FSH 1909.12, chapter 70. The forest considered a range of reasonable alternatives for recommended wilderness. The planning record documents that no new recommended wilderness areas added to the draft ROD that were not previously documented and available for public review and comment.

However, the planning record could include further documentation to support the recommended wilderness decisions, as required by 36 CFR 219.14(d)(2).

Instructions

- Add the meeting notes from 8/12/2020 (*20200812FinalPlanDecisionMeeting*) and 9/9/2020 (*20200909FinalPlanDecisionMeeting*) to the planning record. These notes document final adjustments to the recommended wilderness areas, including the reasons why certain wilderness areas from alternative B were not selected due to concerns about manageability.

- Provide supplemental information about factors that informed the decision to include a mix of recommended wilderness polygons from alternatives B and C. Specifically, highlight the factors that informed removing nine polygons from alternative B in the final decision, as well as the addition of three polygons from alternative C. This could include updating the wilderness evaluation to incorporate staff feedback regarding manageability of these polygons, as reflected in the meeting notes referenced above.

Recommended Wilderness Restrictions

Objection Summary

Arizona Game and Fish Department and Arizona Game and Fish Commission take issue with the additional wilderness recommendations and plan components on the grounds that conversion of multiple-use areas will result in a loss of wildlife-dependent recreational opportunities and economic benefits and will create expensive compliance hurdles to wildlife management. They contend the components inappropriately apply wilderness level standards to recommended wilderness and that the components unnecessarily and unlawfully restrict activities.

The commission also contends that House of Representatives (HR) 2570, the Arizona Desert Wilderness Act of 1990, for the most part, prohibits land managers from recommending additional wilderness areas because the lands have already been reviewed for wilderness designation.

Objectors' Proposed Remedies

Update the EIS with:

- an analysis of effects from RWMA designations that may be in place, indefinitely.
- data to support the need for RWMA plan components to protect values that may be affected by public motorized or mechanized use; and
- a reasonable range of alternatives

Update the plan with:

- RWMA-G-04 re-written as: *Management activities, including transplanting (e.g., removal, reintroduction, or supplemental introduction) fish and wildlife species, ~~should be permitted to~~ may use motorized and mechanical means (~~e.g.,~~ including survey flights and helicopter landings) ~~if necessary,~~ to perpetuate or recover a threatened or endangered species~~, to restore the population of an indigenous species,~~ or to manage fish and wildlife populations.*
- RWMA-G-01 re-written as: *Motorized and mechanized ~~vehicle~~ uses ~~should not be authorized in a recommended wilderness area unless specifically authorized~~ are allowed for emergency use, law enforcement, resource protection, fish and wildlife management activities, maintenance of authorized improvements, ~~or~~ and for the motorized retrieval of legally harvested big game.*
- RWMA-DC-05 removed.

Update the ROD with:

- *…[M]y decision restricts motorized and mechanized means of transportation in recommended wilderness areas, unless specifically authorized for emergency use, law enforcement, resource protection, fish and wildlife management activities, maintenance of authorized improvements, or for the motorized retrieval of legally harvested big game.*

- *This decision preserves the wilderness characteristics, including the undeveloped nature ~~and opportunities for solitude and primitive recreation~~ in recommended wilderness, while recognizing the current authorized uses within these areas.*

Assessment

The plan components referenced by the objector include:

- *RWMA-DC-05: Authorized special uses maintain wilderness characteristics of solitude and primitive and unconfined recreation.*
- RWMA-G-01: Motorized vehicle use should not be authorized in a recommended wilderness area unless specifically authorized for emergency use, resource protection, maintenance of authorized improvements, or for the motorized retrieval of legally harvested big game[84]. *84 Motorized retrieval of legally harvested big game, or motorized big game retrieval, is defined in Travel Management as motor vehicle use solely for retrieving legally harvested elk and bear up to 1 mile on both sides of all designated roads and motorized trails.*
- *RWMA-G-04: Management activities, including transplanting (e.g., removal, reintroduction, or supplemental introduction) fish and wildlife species, should be permitted to use motorized and mechanical means (e.g., helicopter landings) if necessary, to perpetuate or recover a threatened or endangered species, to restore the population of an indigenous species, or to manage fish and wildlife populations.*

The draft ROD describes the programmatic nature of the plan and indicates that it neither authorizes specific activities nor prohibits existing public uses, consistent with FSH 1909.12, chapter 20. Rather, the plan will guide future site-specific decisions needed to maintain or make progress toward desired conditions for recommended wildernesses.

The Multiple-Use Sustained-Yield Act affords the Forest Service discretion for how it balances management of national forest resources. Specifically, Section 2 of the act states, "The establishment and maintenance of areas of wilderness are consistent with the purposes and provisions of this Act."

Appendix B of the memorandum (*Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness)* applies only to Congressionally designated wilderness areas, not recommended wilderness areas, as stated in the "purpose" section of the appendix:

> *This statement of policy and the following guidelines are intended to provide guidance to State fish and wildlife agencies, Forest Service (FS) and Bureau of Land Management (BLM) personnel for the management of fish and wildlife populations in wilderness in accordance with the Wilderness Act of 1964 (16 USC 1131-1136).*

Therefore, the appendix does not govern which activities the responsible official may authorize in a Recommended Wilderness Management Area.

FSH 1909.12, chapter 70 affords the responsible official discretion in management of Recommended Wilderness Management Areas if the recommended wilderness area characteristics are maintained. Specifically, section 74.1 of the handbook states:

> *When developing plan components for recommended wilderness areas, the Responsible Official has discretion to implement a range of management options. All plan components applicable to*

> *a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation.*

The *Recommended Wilderness* section and appendix D of the final EIS described the wilderness inventory and evaluation process, following direction in chapter 70 of FSH 1909.12. Appendix D documented the rationale for each recommended wilderness, described each area's values and characteristics, and identified roads or motorized trails either adjacent to or within each area. Meeting notes from August 12, 2020, and September 9, 2020, provide additional rationale for recommended wilderness areas.

Neither 36 CFR Part 219 nor FSH 1909.12 require an on-the-ground, acre-by-acre evaluation. Land uses and activities that were considered in the analysis include: recreation and tourism; wildlife species, population, and management needs; water availability and use; livestock operations; timber; minerals; cultural resources; authorized and potential uses; and management considerations including fire, insects, disease, and presence of lands of other ownership.

The Tonto's National Forest System lands were analyzed to determine which areas met the criteria for identification of recommended wilderness, as demonstrated in appendix D of the EIS. Additionally, recommended wilderness areas were analyzed to consider the potential impact of wilderness designation on both current and future land uses and activities. Motorized routes and potential impacts upon wilderness characteristics were noted in the evaluation for each recommended wilderness area. The record reflects that the forest identified and analyzed motorized routes—both cherry-stemmed and non-cherry-stemmed—in its travel management plan.

The draft ROD specifies that motorized use in recommended wilderness areas will be allowed if authorized for "resource protection, maintenance of authorized improvements, or the motorized retrieval of big game" (p. 23). RWMA-G-04 specifically provides opportunities for management of wildlife by stating:

> *Management activities, including transplanting (e.g., removal, reintroduction, or supplemental introduction) fish and wildlife species, should be permitted to use motorized and mechanical means (e.g., helicopter landings) if necessary, to perpetuate or recover a threatened or endangered species, to restore the population of an indigenous species, or to manage fish and wildlife populations.*

The *Recommended Wilderness* section of the final EIS analyzed the environmental effects for each alternative (final EIS, volume 2, pp. 218–221).

FSH 1909.12 only requires that plan components for recommended wilderness areas maintain the characteristics which provide the basis for wilderness recommendation; it does not require that a recommended wilderness area recommendation expire by a certain date.

The forest solicited and received public participation during the plan revision process, which included the recommended wilderness process. Public involvement was discussed in the inventory section (p. 97), evaluation section (pp. 110-112); the analysis section (pp. 131, 132, 139, 145, and 147). The forest also responded to comments regarding recommended wilderness areas and constraints on motorized use (final EIS, volume 3, pp. 202-205, concern 215).

Section 102 of the Arizona Desert Wilderness Act releases all public lands administered by the Bureau of Land Management from further wilderness study; the act does not apply to National Forest System lands.

Conclusion

I find that the forest properly developed Recommended Wilderness Management Area plan components in accordance with FSH 1909.12, chapters 20 and 70, and in accordance with its authority afforded applicable by law, regulation, and policy. I find that the plan components for RWMAs provide the flexibility to authorize motorized and mechanized use as needed to manage resources while providing provisions to maintain the characteristics that provided the basis for the wilderness recommendation. However, I find that guideline RWMA-G-01 specifying resource "protections" could unnecessarily restrict needed resource management activities that are not protective in nature.

Instructions

- Add the meeting notes from 8/12/2020 (*20200812FinalPlanDecisionMeeting*) and 9/9/2020 (*20200909FinalPlanDecisionMeeting*) to the planning record. These materials document the rationale for the identification of recommended wilderness areas that were included in the draft ROD.
- Change the word "protection" to "management" in RWMA-G-01 to facilitate the authorization of needed resource management activities that do not adversely affect the social and ecological characteristics that provided the basis for their wilderness recommendation. The reworded guideline would read:

  RWMA-G-01: Motorized vehicle use should not be authorized in a recommended wilderness area unless specifically authorized for emergency use, resource management ~~protection~~, maintenance of authorized improvements, or for the motorized retrieval of legally harvested big game.

Motorized Routes in Recommended Wilderness Areas

Objection Summary

Tonto Recreation Alliance and Arizona State Association of 4 Wheel Drive Clubs take issue with the plan's recommended wilderness areas that would create motorized use corridors around existing routes designated as open to motorized use in the travel management plan. They do not agree with the corridors because they allege it:

- prioritizes wilderness over existing routes open to motorized use that were developed over the course of the development of the travel management plan; and
- will cause user conflicts, despite the motorized use corridor; and
- will impact motorized recreation on existing routes; and
- will conflict wilderness area character.

Tonto Recreation Alliance is also concerned that motorized routes intersect recommended wilderness areas, due to inaccurate drawing of proposed corridors and buffers.

Objectors' Proposed Remedies

Tonto Recreation Alliance:

- Remove the recommended wilderness areas with buffered motorized routes from the plan.
- Use the alliance's data to check and update the locations of the motorized routes, as applicable.

Arizona State Association of 4 Wheel Drive Clubs:

Review the recommended wilderness designations with buffered motorized routes and update them to be in alignment with "logic, available science, and stakeholder input and collaborative agreement."

Assessment

FSH 1909.12, chapter 70, section 71.4 provides discretion to the responsible official to implement a range of management options for recommended wilderness areas. Plan components that exclude motorized and mechanized uses within the recommended wilderness areas intend to protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation.

The draft ROD describes the programmatic nature of the plan and indicates that it does not authorize specific activities, nor does it prohibit existing public uses, consistent with FSH 1909.12, chapter 20. A constraint on the public's use of National Forest System lands, not otherwise imposed by law or regulation, would require the responsible official to take a separate action, such as issuing an order under 36 CFR Part 261, Subpart B. Further, forest plans guide Forest Service actions, but do not directly regulate the public. Therefore, the plan alone does not prohibit public uses such as motorized use within a recommended wilderness area. Rather, the plan will guide future site-specific decisions needed to maintain or make progress toward desired conditions for recommended wildernesses, such as restricting motorized and mechanized uses.

36 CFR 219.10(b)(1)(iv) requires the responsible official to include plan components to provide for management of areas recommended for wilderness designation to protect and maintain their suitability for designation. The draft ROD (p. 22) shows that the forest sought to avoid conflicts with existing authorized uses within the recommended wilderness areas. For example, boundaries of recommended wilderness areas were drawn to avoid motorized use corridors to the extent practical (final EIS, volume 4, appendix D, p. 111) and 300-foot buffers around existing routes within or adjacent to recommended wilderness areas were developed to increase manageability of these areas. The draft ROD (p. 23) acknowledges that there are limited inconsistent land uses and mechanized and motorized uses that will be excluded within the recommended wilderness area boundaries.

36 CFR 219.15(e) states that resource plans, such as travel management plans, developed prior to decision must be evaluated for consistency with the plan and updated if necessary. However, it does not state when this must occur. The National Forest Management Act at USC 1604(i) states that "when land management plans are revised, resource plans...when necessary, shall be revised as soon as practicable." The draft ROD reflects that this decision is programmatic (p. 23) and "does not authorize any activities or prohibit public uses. Rather, it will guide the future site-specific decisions needed to maintain or make progress toward the desired conditions for recommended wilderness." Therefore, updates to travel management would be appropriate and within the direction of the planning rule and the National Forest Management Act to be addressed in future, site-specific project-level decisions.

The forest completed the site-specific travel management decision to designate roads and trails for motor vehicle use in 2021. In the travel management ROD, the forest acknowledged that the mapping and database information to produce the decision were not completely accurate and some routes "on the ground" were not accurately depicted on maps. It was the expressed intent of the forest to draw boundaries of recommended wilderness areas around non-conforming use areas such as motorized routes where features inconsistent with wilderness characteristics were only located on a small portion of the overall polygon (final EIS, volume 4, appendix D, p. 111). Documentation of adjustments and decisions to avoid off highway vehicle areas are found within the wilderness evaluation rationale spreadsheet. The forest used the travel management planning data to draw the buffers around recommended wilderness areas.

The forest documented their wilderness evaluation in appendix D of the final EIS, in accordance with FSH 1909.12, chapter 70, noting the presence of motorized routes and potential impacts upon wilderness characteristics for each of the recommended wilderness areas. The record reflects that the forest identified and analyzed the extent to which motorized uses could detract from characteristics that would make areas eligible for wilderness designation.

Conclusion

I find the forest acted within its authority to provide plan direction to restrict motorized use within recommended wilderness areas and to establish buffers around motorized use corridors within or adjacent to recommended wilderness areas to protect the characteristics that provide the basis of suitability for wilderness designation (36 CFR 219.10(b)(1(iv)).

The responsible official acted within his discretion to evaluate and identify recommended wilderness areas that limit or avoid non-conforming uses such as roads and motorized trails. However, the planning record suggests that data used to develop the forest's travel management plan may not be completely accurate and therefore, providing inaccurate mapping information for motorized routes intersecting with recommended wilderness areas.

Instructions

Adjust recommended wilderness management area mapped boundaries to address known inaccuracies based on available information prior to plan decision. Clarify in the record of decision that a recommended wilderness management area boundary is defined by the 300-foot buffer around the physical centerline of the open motorized route and that corrections may be made to the map with an administrative change to reflect the 300-foot buffer around motorized routes described in the decision.

Mining in Recommended Wilderness

Objection Summary

Freeport-McMoRan does not agree with the inclusion of recommended wilderness approach RWMA-MA-01 and the modification of RWMA-S-01.

Additionally, the objector does not agree with RWMA-S-04 because they allege that it conflicts with the Multiple-Use Sustained-Yield Act, "which stipulates that "[n]othing herein shall be construed so as to affect the use or administration of the mineral resources of national forest lands or to affect the use or administration of Federal lands not within national forests" and the Wilderness Act, which states that

"[n]othing in this chapter shall prevent within national forest wilderness areas any activity, including prospecting, for the purpose of gathering information about mineral or other resources, if such activity is carried on in a manner compatible with the preservation of the wilderness environment."

Objector's Proposed Remedies

- Delete RWMA-MA-01.
- Return RWMA-S-01 to its previous version.

Assessment

The plan content referenced by the objector includes:

- *RWMA-S-01: New permanent or temporary roads, motorized trails, or mechanized trails for public access shall not be constructed or designated in a recommended wilderness area.*
- *RWMA-S-04: Sales or extraction of mineral materials[83] shall not be permitted in recommended wilderness areas.*
- *[83]Mineral materials/salable materials/common variety minerals, are synonymous terms for the same class of minerals that can be sold under a mineral material contract and are common. These minerals are relatively low value per volume, for example: sand, gravel, cinders, common building stone, and flagstone.*
- *RWMA-MA-01: Work with partners and volunteer groups to manage and maintain wilderness characteristics in recommended wilderness areas and to facilitate user support and reduce user conflicts.*

FSH 1909.12, chapter 70 grants the responsible official considerable discretion in developing plan components, subject to valid existing rights (bold emphasis added):

> *74.1 – Management of Recommended Areas*
>
> *When developing plan components for recommended wilderness areas, the Responsible Official has discretion to implement a range of management options. All plan components applicable to a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation. In addition, the plan may include one or more plan components for a recommended wilderness area that:*
>
> 1. *Enhance the ecological and social characteristics that provide the basis for wilderness designations;*
> 2. *Continue existing uses, only if such uses do not prevent the protection and maintenance of the social and ecological characteristics that provide the basis for wilderness designation;*
> 3. *Alter existing uses, **subject to valid existing rights**; or*
> 4. *Eliminate existing uses, except those uses **subject to valid existing rights**.*

Similarly, FSH 1909.12, chapter 20, section 22.1 states that plan components "[m]ay not interfere with statutory or **valid existing rights**" (bold emphasis added) It also states that plan components "[m]ay be used to carry out laws, regulations, or policies, but should not merely repeat existing direction from laws, regulations, or directives." Thus, retaining the phrase "unless there are valid existing rights" in RWMA-S-01 would be redundant. However, the plan could benefit from adding clarity that the plan is subject to valid existing rights.

The phrase “reduce user conflicts” in RWMA-MA-01 is not a binding requirement of law, regulation, or policy. As stated on page 14 of the plan:

> *Management approaches do not offer plan direction but describe an approach or strategy to manage the unit to achieve a desired condition. Management approaches often convey how plan components work together to achieve the desired condition. They may also describe context, intent, priorities, partnership opportunities and coordination activities, or future inventories or assessments. Not every resource topic area has a management approach heading as they are not required or a plan component. Changes to management approaches do not require plan amendments.*

The Multiple-Use Sustained-Yield Act affords the Forest Service discretion in balancing management of the resources found on the national forests. Section 2 of the act states, “The establishment and maintenance of areas of wilderness are consistent with the purposes and provisions of this Act.” The act defines “multiple use” to allow the Forest Service to manage national forest resources for values such as wilderness characteristics. As stated in Section 4 of the act, (bold emphasis added):

> *The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions;* ***that some land will be used for less than all of the resources****; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.*

Therefore, the agency has authority to provide direction in the land management plan that would retain or improve the wilderness characteristics of recommended wilderness areas if and until they are considered for designation by Congress, such as by not permitting the sale or extraction of mineral materials in recommended wilderness, subject to valid existing rights.

Conclusion

I find that the forest acted within its authority in developing plan components for recommended wilderness areas as outlined in FSH 1909.12, chapter 70.

Instructions

Include a statement in chapter 1 of the plan that nothing in the plan affects, nor does it have the authority to affect, valid existing rights established by statute or legal instruments.

Coronado Mesa Recommended Wilderness Area

Objection Summary

Salt River Project is concerned with potential conflict between the Coronado Mesa Recommended Wilderness Area and multiple use management because a buffer between the recommended wilderness area and existing infrastructure may not be sufficient to meet future energy needs.

They question the accuracy of the Coronado Mesa Recommended Wilderness Area wilderness characteristic evaluation due to the area's proximity to existing projects, reclamation withdrawn lands, and the potential Apache Lake pumped storage project (PSP) site. They believe that Coronado Mesa Recommended Wilderness Area and RWMS-S-03 and RWMA-G-08 could restrict development of the proposed Apache Lake pumped storage project.

Objector's Proposed Remedy

Revise the land management plan and ROD to exclude the Coronado Mesa area from recommended wilderness designation.

Assessment

The plan components referenced by the objector include:

- *RWMA-S-03: New energy developments or authorizations shall not be permitted within recommended wilderness areas.*
- *RWMA-G-08: New permanent improvements should not be authorized in recommended wilderness areas unless necessary for public health and safety, resource protection, or viability of valid existing rights and authorized uses.*

FSH 1909.12, chapter 70, section 72.1 provides direction for the evaluation of wilderness characteristics. The evaluation criteria do not require the forest to evaluate the impact of adjacent lands upon wilderness characteristics within the area of analysis, however the handbook suggests several factors related to adjacent land uses to consider during evaluation. The handbook also directs that an evaluation considers factors such as topography, screening, distance from impacts outside of the area of analysis, and management of adjacent lands.

Appendix D of volume 4 of the final EIS describes the evaluation criteria applied by the forest, including locally developed expanded evaluation criteria and documents the evaluation results for each area considered for recommended wilderness. The record reflects that the forest considered the proximity of recommended wilderness areas to high use areas, roads, private lands, and/or activities that impact opportunities for solitude (final EIS, volume 4, appendix D, p. 118-119, table 41), as well as the general topography and its impacts on the visual, spatial, and acoustic environment. The record also reflects that the forest considered the management of adjacent lands and considered current management plans, activities, and/or restrictions for the areas (final EIS, volume 4, appendix D, p. 121, table 43).

The record also reflects that the presence of Bureau of Reclamation withdrawals impacted the manageability ranking of areas when considering the potential for ground disturbing activities to occur. The forest supervisor made the decision to buffer out the Bureau of Reclamation withdrawals from the areas prior to consideration for recommended wilderness due to potential infrastructure needs in the future. This includes Polygon 32 (Coronado Mesa Recommended Wilderness Area) (planning record 2031).

The evaluation of Polygon 32 (Coronado Mesa Recommended Wilderness Area) (final EIS, volume 4, appendix D, pp. 214-216) describes proximity to roads, powerline rights of ways, and Bureau of Reclamation first form withdrawal lands. The analysis states that:

No projects or management plans that would impact the wilderness characteristics of the area and the presence and extent of management activities and other uses that detract from wilderness characteristics are isolated. The boundary of the area has been adjusted to remove the communication site on rock butte. This is in the communication site flight path, as a helicopter is used to access the site. This area contains at least one Salt River Project (SRP) improvement and/or right of way…

The forest acknowledged the comments regarding existing operations and expressed intent to factor this information into the decision. The page 147 of the final EIS (volume 4, appendix D) demonstrates that there were no non-conforming uses within the Coronado Mesa Recommended Wilderness Area polygon and that "projects or management plans that would impact the wilderness characteristics of the area and the presence and extent of management activities and other uses that detract from wilderness characteristics are isolated."

A review of meeting notes from August 12, 2020, and September 9, 2020, which included the planner's discussions with the forest supervisor and district rangers, demonstrate that the forest reduced the recommended wilderness area polygon to create 300-foot buffers around access roads and transmission lines that would address the concerns raised at the time. The draft ROD reflects that the size of the polygon included in the decision was reduced from 6,515 acres to 6,419 acres presumably to account for the buffers necessary for maintenance and operations.

FSH 1909, chapter, 70, section 74.1 explains that "all plan components applicable to a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation." Further, the responsible official has the discretion to alter or eliminate existing uses, except for those subject to valid existing rights (36 CFR 219.10(b)(1)(iv) and FSH 1909, chapter 70, section 74.1). The plan components of concern by the objector are appropriate to protect and maintain the recommended wilderness characteristics.

The objector highlighted the Reclamation Act of 1902 in reference to their concern about potential conflicts with the Coronado Mesa Recommended Wilderness Area and the future of renewable energy projects. The Reclamation Act of 1902 established the precursor to the Bureau of Reclamation and provided the Secretary of Interior the authority to withdraw lands for potential irrigation and provided direction on the management of these withdrawn lands. The act applies to Bureau of Reclamation withdrawn lands; it does not apply to National Forest System lands surrounding those areas.

Executive Order 14008, of January 27, 2021, places the climate crisis at the forefront of foreign policy and national security planning. While Section 107 of the order does refer to renewable energy on federal land, it appears focused on wind energy and does not require agencies to submit to all projects labeled as renewable. Section 207 (Renewable Energy on Public Lands and in Offshore Waters) directs the Department of Interior to take steps to ensure renewable energy development is encouraged and offshore wind is doubled by 2030, including interagency coordination and consultation with tribes about renewable energy development. As this section of the order is directed to the Department of Interior, it does not apply to the Forest Service, which is a Department of Agriculture agency.

The forest responded to concerns raised by the objector regarding the Coronado Mesa Recommended Wilderness Area in the final EIS (volume 3, pp. 205-206, concern 216). Comments on the draft EIS expressed concern about access to existing infrastructure. However, information regarding the potential

Apache Lake pumped storage project was not available during the recommended wilderness evaluation because the potential Apache Lake pumped storage project within the Coronado Mesa Recommended Wilderness Area is new information that was provided after the release of the draft ROD.

Conclusion

I find that the evaluation and identification of recommended wilderness areas is consistent with the Multiple-Use Sustained-Yield Act, the National Forest Management Act (16 USC 1604(e)(1)), and the planning rule (36 CFR 219.10 (b)(1(iv)). The draft ROD reflects an intent to mix and balance management strategies that assure multiple-use management. The forest sufficiently applied wilderness evaluation criteria from FSH 1909.12, chapter 70, section 72.1 to document and account for the impacts of adjacent land uses on the wilderness characteristics and manageability of recommended wilderness areas.

The forest developed management direction for recommended wilderness areas is consistent with FSH 1909.12, chapter 70, section 74.1 to protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation.

Additionally, the forest took into consideration access needs for existing roads, powerline rights of ways, and infrastructure in developing the boundary for the recommended wilderness area, consistent with concerns raised originally by the objector in their response to the draft EIS.

Instructions

None.

WILD AND SCENIC RIVERS

Wild and Scenic River Designations

Objection Summary

Sierra Club et al. claim that the forest's evaluation of wild and scenic river eligibility is not consistent with the Wild and Scenic Rivers Act and is arbitrary and capricious. They state that the plan should include the Haigler, Spring, Sycamore, Ellison, Pinto, Lime, and Pine creeks and the Lower Salt River as eligible wild and scenic rivers and Cherry Creek as a recommended wild and scenic river because these waterways are free-flowing and have at least one outstanding remarkable value that were not recognized.

The objectors also state that the region of comparison is not the best available scientific information, nor a valid metric for evaluating wild and scenic river eligibility.

Objectors' Proposed Remedies

- Reevaluate the evaluation of outstanding remarkable values.
- Add Sierra Club et al.'s eligible river segments recommendations to the plan and preferred alternative.
- Retain Cherry Creek as an eligible wild and scenic river, specifically segment the 14.3 mile long "wild" 1-a segment and the 6.4 mile long "scenic" 1-b segment.

Assessment

Segment Eligibility

In conducting the wild and scenic river eligibility evaluation, the forest considered the Haigler, Spring, Sycamore, Ellison, Pinto, Lime, and Pine creeks and the Lower Salt River segments for potential eligibility per 36 CFR 219.7(c)(2)(vi). The initial review of these segments is documented within *WSR Tonto NF Possibly Eligible Draft Rational Spreadsheet* (planning record 2007), which found that Haigler Creek, Spring Creek, Sycamore Creek, Ellison Creek, Pinto Creek, Cherry Creek, and Lime Creek do not have outstandingly remarkable value within the region of comparison and are therefore not eligible for the National Wild and Scenic River System. In the response to comments on the draft plan, the forest also repeated a review for outstandingly remarkable values on Ellison Creek, Haigler Creek, Spring Creek, Cherry Creek, Sycamore Creek, and Pinto Creek and found that, consistent with the initial review, these segments do not have outstandingly remarkable values within the region of comparison (final EIS, volume 4, appendix E).

The forest also re-reviewed the Lower Salt River for eligibility, finding that it does not qualify for eligibility for the National Wild and Scenic River System because it does not meet the definition of free flowing (final EIS, volume 4, appendix E, p. 363).

Pine Creek is considered eligible for inclusion in the National Wild and Scenic Rivers System with a geologic outstandingly remarkable value (final EIS, volume 4, appendix E, p. 385).

Of specific concern to the objector is the eligibility of Cherry Creek and the creek's change in eligibility from an eligibility study completed in 1993. Per the planning rule (36 CFR 219(c)(2)(vi)), an eligibility study should be completed if a previous evaluation was not completed according to the standards for an eligibility analysis cited in FSH 1909.12, chapter 80, section 82.93, or if there are changed circumstances (as described in FSH 1909.12 chapter 80, section 82.4). The decision to reevaluate this creek was documented in the draft and final wild and scenic rivers eligibility studies (final EIS, volume 4, appendix E), which states that the interdisciplinary team determined that an additional, more comprehensive study was required to fulfill requirements of the planning rule.

The forest documented the rationale for a reevaluation and assessed Cherry Creek and the other referenced segments using the criteria and region of comparison that was established in the *Draft Wild and Scenic Rivers Eligibility Study* and the *Wild and Scenic Rivers Eligibility Rationale Spreadsheet*. The forest's determination of Cherry Creek as ineligible was appropriate according to the criteria.

Region of Comparison

The region of comparison for the study was the state of Arizona, as noted in the final EIS, volume 4, pages 349-350. The use of a region of comparison is an integral part of the wild and scenic river evaluation process and requires the best judgment of the interdisciplinary team, with feedback from the public during comment periods, to establish an area that encompasses a wide range of river values so that they may be compared and clarify the criteria for the values. Removing this from the evaluation process would be inconsistent with direction in FSH 1909.12. chapter 80, section 82.73.

As it relates to the objectors' suggested remedies:

- The forest analyzed potential segments in accordance with direction in the Wild and Scenic Rivers Act, but the record does not clearly demonstrate the analysis of some of the segments

cited by Sierra Club et al. The instructions below state which segments need additional information.

- The forest's determination of Cherry Creek as ineligible was appropriate according to the criteria in the region of comparison analysis.
- The forest's choice to reevaluate rivers was appropriate because there was a need to update the eligibility review from 1993, as the forest documented in the record. There is no need to re-evaluate its evaluation of outstandingly remarkable values.

Conclusion

I find that the forest adequately complied with applicable requirements and documented the rationale and process supporting the analysis for all named segments in the objection consistent with 36 CFR 219.7(c)(2)(vi) and FSH 1909.12, chapter 80. The rationale provided is sufficient for me to conclude the wild and scenic river related decisions of this plan revision satisfy all applicable regulation, law, and policy. However, additional documentation would be beneficial for addressing the objectors' concerns. I also find that the determination of the State of Arizona for the region of comparison is consistent with FSH 1909.12. chapter 80, section 82.73.

Instructions

Provide additional documentation to clarify and/or address the objectors' concerns on the wild and scenic rivers eligibility study.

- Add more narrative around potential outstanding remarkable values for each evaluated segment. A sufficiently documented rationale for eligible and ineligible streams could include uniform, clear documentation of the sequence of considerations that was made. For example, if streams were analyzed in the order of free-flow, water quality, and outstanding remarkable values, the rationale would state whether each segment met the standard for those criteria and the subsequent outcome (eligible or ineligible).
- Include the eligibility analysis narratives in the record and/or add additional documentation to the narratives.
- Add appendix, A directly to the wild and scenic rivers eligibility study document, rather than publishing it as a separate document for ease of reference (*20171016 WSR Tonto NF Possibly Eligible Draft Rational Spreadsheet*).
- Provide additional information on the findings related to Cherry Creek and Pinto Creek and explain why they are not considered sister creeks to the extent that it could impact the outcome of their evaluation.
- Provide a brief overview of the part of the evaluation process where river segments were identified and provide information on considerations that were made regarding FSH 1909.12, chapter 80, section 82.61(2).
- Describe which of the eligibility criteria was not met for Haigler, Sycamore, and Pine creeks.
- Ensure *20171016 WSR Tonto NF Possibly Eligible Draft Rational Spreadsheet* is in the planning record and the response to comments provide the same information for the Lower Salt River's eligibility.
- Add a description of the Ellison Creek segment.

Eligible Wild and Scenic River Management Area

Objection Summary

Freeport-McMoRan is concerned with the new sentence, "The Tonto has 19 river segments with outstandingly remarkable values, totaling approximately 188 miles (table 18)," and its accompanying footnote, "A scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar river-related value that is unique, rare, or exemplary feature and is significant when compared with similar values from other rivers at a regional or national scale" on page 141 of the plan. The objector notes that the draft plan had 20 identified rivers and 128 miles, whereas the final plan has 19 identified rivers and 188 miles. The objector is concerned about this because, while the plan does not officially designate rivers as wild and scenic, the plan's standards and guidelines provide direction for these river segments until a decision is made on their suitability to be a designated wild and scenic river.

They are also concerned with the forest's modification of footnote 87 on page 142 of the plan which replaced "geographic area" with "management corridor for eligible wild and scenic rivers includes National Forest System land" and added "of the riverbanks ordinary high-water mark" and the Forest Service policy citation. The objector is concerned about these changes because they did not have an opportunity to comment on the "implication of this critical modification."

Objector's Proposed Remedy

Revert footnote 87 to the wording in the draft plan.

Final plan version:

> *The management corridor for eligible wild and scenic rivers includes National Forest System land generally encompassed within one-quarter mile of the riverbanks ordinary high-water mark on either side of a river studied for eligibility or suitability that contains the river and its outstandingly remarkable values (FSM 1909.12, 80.5).*

Draft plan version:

> *The geographic area generally encompassed within one-quarter mile on either side of a river studied for eligibility or suitability that contains the river and its outstandingly remarkable values*.

Assessment

The forest has provided rationale for the changes in a number of eligible segments and river miles from draft to final by discussing the incorporation of public comments and additional information in the final EIS (volume 4, appendix E, pp. 361-364). An agency preparing a final environmental impact statement shall consider substantive comments and may respond by modifying alternatives, including the proposed action; developing and evaluating alternatives not previously given serious consideration; supplementing, improving, or modifying its analyses; making factual corrections; and explaining why the comments do not warrant agency response (40 CFR 1503.4).

Additionally, changes to a proposed action may occur between a draft and final EIS. Changes may occur due to new circumstances, new information, or in response to comments received on the draft environmental impact statement. If changes to the proposed action or new circumstances or

information relevant to environmental concerns is not significant, the agency need not prepare a supplement (40 CFR 1502.9(d)(4)).

It would be beneficial to take the information in footnote 87 and insert it into the final EIS (volume 4, appendix E, pp. 361-364) to add specificity to the term “geographic area” and retain the original intent of the statement.

Conclusion

I find that the forest has sufficiently documented the reason for the changes in a number of eligible segments and river miles from draft to final in the final EIS (final EIS, volume 4, appendix E). However, further explanation could be provided for the public to better understand the rationale.

Instructions

Move the information in footnote 87 to the final EIS (final EIS, volume 4, appendix E) and document the reason for the wording changes (e.g., new circumstances, new information, response to public comments). Documentation should also state whether the changes, new circumstances, or new information relevant to environmental concern does or does not require a supplemental EIS per 40 CFR 1502.9(d)(4), and provide supporting rationale.

Multi-Jurisdictional Coordination in Designated and Eligible Wild and Scenic River Management Areas

Objection Summary

Freeport-McMoRan objects to the addition of DWSRMA-MA-07 and the modification of EWSRMA-MA-03 from its previous version with the addition of "encourage multijurisdictional coordination…where management actions upstream or downstream may impact eligibility." They state that the management approaches are overly broad, burdensome, and costly, which will "likely lead to an arbitrary and capricious interpretation or application." Freeport also objects to the modification of DWSRMA-DC-05 with the replacement of "permitted uses" with "domestic livestock grazing and constructed range improvements" and the replacement of "do not impact" with "maintain or enhance" for the same reasons.

Objector’s Proposed Remedies

- Delete DWSRMA-MA-07 from the plan.
- Revert EWSRMA-MA-03 to the version provided in the draft plan.
- Either delete DWSRMA-DC-05 or revert it to the draft plan version.

Assessment

The plan content referenced by the objector includes:

- *DWSRMA-DC-05: Permitted uses within the river corridor maintain or enhance the river segment’s outstandingly remarkable values and are consistent with the river segment’s classification.*

- *DWSRMA-MA-07: Encourage multijurisdictional coordination on the management and monitoring of conditions within the stream corridors of designated wild and scenic rivers where management actions upstream or downstream may have impacts.*
- *EWSRMA-MA-03: Encourage multijurisdictional coordination on the management and monitoring of conditions within the stream corridors of eligible wild and scenic rivers where management actions upstream or downstream may impact eligibility.*

Both DWSRMA-MA-07 and EWSRMA-MA-03 encourage multijurisdictional and collaborative coordination amongst stakeholders on the management of either eligible and/or designated wild and scenic rivers or segments of river. This is in alignment with 36 CFR 219.7(f)(2) which states that "a plan may include additional content, such as potential management approaches or strategies and partnership opportunities or coordination activities." The planning rule describes management approaches as a potential course of action to move towards desired conditions, as opposed to firmer objectives (36 CFR 219.7(e)(1)(ii)) and standards (36 CFR 219.7(e)(1)(iii)). There is no indication that DWSRMA-MA-07 or EWSRMA-MA-03 require or designate a lead agency or partner in the collaborative coordination. Encouraging collaboration through these management approaches merely serves as an invitation for dialogue amongst a range of stakeholders.

Freeport also objects to the modification of DWSRMA-DC-05. This desired condition states:

> *Permitted uses within the river corridor maintain or enhance the river segment's outstandingly remarkable values and are consistent with the river segment's classification.*

The objector does not like the replacement of "domestic livestock grazing and constructed range improvements" in the draft plan with "permitted uses" in the final plan. The aspirations of DWSRMA-DC-05 as a desired condition aligns with the intent of the Wild and Scenic Rivers Act and FSM 2300, chapter 2350. The term "permitted uses" is more accurate than "domestic livestock grazing and constructed range improvements" as all permitted uses would need to comply with the act and Forest Service policy. The phrase "maintain or enhance" is also a more accurate approach to permitting harmonious activities in the river corridor. An impact can be identified for nearly any activity in the river corridor, but the purpose of the river's protection is to "protect and enhance" the values for which it was designated. This phrase is used in the Wild and Scenic Rivers Act. The forest has revised its statements to reflect its role and intentions more accurately for the rivers, while retaining the original meaning. The forest also documented rationale for the changes on page 20 of the final EIS (volume 1).

Conclusion

I find that the inclusion of plan content that encourage multijurisdictional and collaborative coordination amongst stakeholders on the management of either eligible and/or designated wild and scenic rivers is in alignment with 36 CFR 219.7(f)(2). There is no evidence that DWSRMA-MA-07 or RWSRMA-MA-03 require or designate a lead agency or partner in this collaborative coordination. As such, merely encouraging collaboration through these management approaches is not overly broad, burdensome, and/or costly, but rather serves as an invitation for dialogue amongst a range of stakeholders.

The desired condition is no more restrictive than what the Wild and Scenic Rivers Act requires. The forest has revised its statements between draft and final EIS to reflect their role and intentions more

accurately for wild and scenic rivers while retaining the original meaning and included rationale for the changes on page 20 of the final EIS (volume 1).

Instructions

Edit DWSRMA-DC-05 from “maintain and enhance” to “protect and enhance” to remain consistent with terminology in the Wild and Scenic Rivers Act and FSM 2300, chapter 2350.

Designated and Eligible Wild and Scenic River Management Area Standards’ Alignment with Other Policies

Objection Summary

Arizona Game and Fish Department objects to standards DWSRMA-S-1, EWSRMA-S-1, and EWSRMA-S-2 because they do not align with policy as provided in FSM 2300, chapter 2350, section 2354.73(7) for fish and wildlife projects proposed by a state agency, which states: “Permit water resources projects even though they may affect free-flowing characteristics if all of the following conditions exist…” Further, the department states that this policy should be applied not only to designated wild and scenic rivers, but also to Forest Service recommended eligible rivers.

The department provides two examples in which they allege that the policy was not understood by the Forest Service, resulting in "costly and unnecessary" decisions by the Forest Service to not allow the department to construct/reconstruct fish barriers in eligible wild and scenic rivers.

The Arizona Game and Fish Commission echoes the department’s concerns in their objection:

> *Although the Forest Service Manual states that water resource projects proposed by a federal or state agency, are entitled to a deferential standard of review by the Forest Service, there appears to be a lack of understanding of this Policy at the statewide Forest Service staff level. As a result, the Department has experienced costly and unnecessary delays due to the Forest Service's reluctance to the use and benefit of fish barriers in designated or eligible river segments.*

Objectors’ Proposed Remedies

Arizona Game and Fish Department:

Add two new standards, DWSRMA-S-02 and EWSRMA-S-03, to the plan, which would read:

> *Water resources projects proposed by a Federal, State or local government agency may be permitted even though they may affect the free-flowing characteristics if the specific purpose of the project is to protect or enhance the values for which the river was designated or is being studied, restores the natural characteristics of the river, and/or improve the water quality of the river.*

Arizona Game and Fish Commission:

None provided.

Assessment

The plan components referenced by the objectors include:

- *DWSRMA-S-01: The free-flowing condition, classification, and outstandingly remarkable values for wild and scenic river corridors shall be maintained when implementing projects.*
- *EWSRMA-S-01: The existing outstandingly remarkable values, free-flowing condition, and classifications of eligible wild and scenic river corridors are protected or enhanced.*
- *EWSRMA-S-02: Activities in an eligible river corridor shall comply with interim protective measures outlined in the FSH 1909.12, 84.3, or the most current version.*

The objectors expressed concerns with DWSRMA-S-01, EWSRMA-S-01, and EWSRMA-S-02 because they think these standards do not align with policy for fish and wildlife projects proposed by a state agency in FSM 2300, chapter 2354.73(7):

> *7. Permit water resources projects even though they may affect free-flowing characteristics if all of the following conditions exist:*
>
> > *a. The specific purpose of the project is to protect or enhance the values for which the river was designated or is being studied, restores the natural characteristics of the river, and/or improves the water quality of the river.*
> >
> > *b. Associated impacts on free-flowing characteristics of the river are minimized to the extent practicable; and,*
> >
> > *c. The proponent and manager of the project is a Federal, State, or local governmental entity.*

Although this section of the manual may give the impression of a deferential standard of review, as stated by the objector, this is not the case. In context with the guidance proceeding this section, and Section 7 of the Wild and Scenic Rivers Act, the phrase "may affect free-flow" from FSM 2300, chapter 2350, section 2354.73(7) does not imply that a project proposal would not still be subject to an analysis to deem whether that effect to free-flow was "direct and adverse." It would be misleading to include a citation to this part of the guidance in the management action without the context of the proceeding section 2354.73(6) and Section 7(a) of the act:

> *FSM 2354.73(6): "Do not permit a water resources project under any of the following conditions: a. The project would have a direct and adverse effect on, or unreasonably diminish designated river values."*
>
> *Section 7(a): "No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established."*

The Wild and Scenic Rivers Act states that project proposals should maintain the integrity of the values for which a waterway was designated and that "primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development," (Section 10(a)). DWSRMA-S-1 and EWSRMA-S-1 reflect this requirement from the act.

FSH 1909.12, chapter 80, section 84.3, which was referenced in EWSRMA-S-02, states:

A Responsible Official may authorize site-specific projects and activities on National Forest System lands within legislatively mandated study river corridors, or within Forest Service-identified eligible or suitable river corridors when the project and activities are consistent with the following interim protection measures...For Forest Service-identified (sec. 5(d)(1)) eligible or suitable rivers, water resources projects proposed on these segments are not subject to section 7(b) of the Act; however, these projects shall be analyzed as to their effect on a river's free-flow, water quality, and outstandingly remarkable values, with adverse effects to be prevented to the extent of existing agency authorities (such as special-use authority).

The objector has expressed concern over "costly and unnecessary delays due to the Forest Service's reluctance to the use and benefit of fish barriers"; a more effective remedy could be an emphasis placed on a collaborative approach to developing project proposals between Arizona Game and Fish Department and the Forest Service. A starting point in improving collaboration could include discussion and distribution of the Forest Service whitepaper *Q&A's Relating to Wild and Scenic River Eligibility, Suitability, and Fish Passage Barrier Projects*.

Conclusion

I find that the forest is consistent with sections 7 and 10(a) of the Wild and Scenic Rivers Act and existing Forest Service policy to protect free-flow and outstanding remarkable values. However, to address the concerns around potential costs and delays with fish barrier projects, I direct the forest to provide clarification on the commitment of the forest to use FSM 2300 policy and process for approving fish barriers. The whitepaper *Q&A's Relating to Wild and Scenic River Eligibility, Suitability, and Fish Passage Barrier Projects* provides clarification on the process.

Instructions

Add *Q&A's Relating to Wild and Scenic River Eligibility, Suitability, and Fish Passage Barrier Projects* to the planning record to provide clarification on fish barrier projects.

Mining in Wild and Scenic Rivers

Objection Summary

Freeport-McMoRan objects to the inclusion of DWSRMA-S-02 and is not satisfied with the Forest Service's response to their comment, which states that "Sales or extraction of mineral materials shall not be authorized in wild and scenic rivers." In their comments, Freeport-McMoRan had requested the Forest Service delete the standard from the plan because they alleged that it conflicts with the Multiple-Use Sustained-Yield Act and 16 USC 528 and 1280(a) of the Wild and Scenic Rivers Act, which states: "[n]othing in this chapter shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system."

Objector's Proposed Remedy

Delete DWSRMA-S-02 from the plan.

Assessment

The plan component referenced by the objector includes:

> *DWSRMA-S-02: Sales or extraction of common variety minerals shall not be authorized in wild and scenic rivers.*

DWSRMA-S-02 is only applicable to salable materials, which are also known as mineral materials or common variety minerals, and include sand and gravel, decomposed granite, and building stone. The forest has the authority to authorize the disposal of salable minerals/mineral materials including where reasonable protection of, or mitigation of effects on, other resources in assured, and where removal is not prohibited (36 CFR Part 228). The prohibition of removal of mineral materials is established by 36 CFR 228.41(b)(2) for the disposal of mineral materials, where the Forest Service has discretion to deny disposal of salable minerals, such as sand and gravel and common variety building stone.

Furthermore, the Multiple-Use Sustained-Yield Act defines "multiple use" to allow the Forest Service to manage national forest resources for values such as those provided by designated wild and scenic rivers. Section 4 of the act provides the following definition:

> *The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.*

Additionally, the Wild and Scenic Rivers Act states that "Nothing in this chapter shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system" (as noted by the objector); however, the act goes on to provide exceptions to this such as if the mining claim/operations are new (16 USC 1280 (a)). Section 9(a)(i) of the Wild and Scenic Rivers Act provides that "all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the...Secretary of Agriculture may prescribe to effectuate the purposes of this Act." If salable mineral material activities have not already been established in these river corridors, it is appropriate for the forest to include a prohibition for future extraction of mineral materials in the plan components, consistent with the applicable comprehensive river management plan.

Conclusion

I find that the forest properly exercised its discretion in developing DWSRMA-S-02 regarding the sales or extraction of mineral materials in designated wild and scenic rivers.

Instructions

None.

RANGE

Range Plan Components

Objection Summary

Freeport-McMoRan states that GRZ-S-01 and GRZ-G-09 will potentially be overly burdensome and costly to implement, are arbitrary as related to industry and application, and are inconsistent with regulations and/or are outside the forest's regulatory authority (objector cites no specific regulation).

Objector's Proposed Remedy

Delete GRZ-S-01 and GRZ-G-09.

Assessment

The plan components referenced by the objector include:

- *GRZ-S-01: Range improvements should be maintained to specifications to provide their intended function and extend the useful life of the improvement. Range improvements should be removed or decommissioned when no longer needed.*
- *GRZ-G-09: A stock and monitor approach[21] incorporating best available science should be used when evaluating stocking rates in grazing decisions.*

  [21]The stock and monitor approach involves measuring the effects of actual stocking levels over time (either short-term or long-term) on utilization and utilization patterns, composition of vegetation, vigor, soil cover, and other factors (including wildlife) to see if changes in stocking and/or management are needed (Smith et al. 2012).

GRZ-S-01 directs Forest Service staff to ensure that range improvements are maintained while in use and removed when no longer needed. This direction is within the forest's discretion and is consistent with the Forest Service range regulations at 36 CFR Part 222. The direction would be implemented by Forest staff through the issuance of grazing permits, allotment management plans, and annual operating instructions issued to grazing permittees. Adaptive management is important when evaluating stocking rates on allotments. The stock and monitor approach, per Smith et al. 2012, is an important adaptive management tool to determine if stocking or management changes. The guideline at GRZ-G-09 would direct Forest staff to utilize this method when evaluating stocking rates. The final EIS response to comments identifies a need to complement the statistical figure of animal unit months (AUMs) with other rangeland monitoring (final EIS, volume 3, p. 169, concern 192).

The objector does not provide rationale for how the identified plan components would be overly burdensome or costly to implement, and no such basis is found in the final EIS. The Forest Service has broad authority to regulate grazing and related uses on the National Forests. See, for example, 36 CFR 222.1: "The Chief, Forest Service, shall develop, administer and protect the range resources and permit and regulate the grazing use of all kinds and classes of livestock on all National Forest System lands and on all other lands under Forest Service control." The use of best available science is a requirement under multiple federal laws and regulations, including the planning regulations at 36 CFR Part 219. Consistent with the Multiple-Use Sustained-Yield Act, the forest has sought to "sustain the multiple use of its renewable resources in perpetuity while maintaining the long-term health and productivity of the land" (36 CFR 219.1(b); land management plan, p. 12).

Conclusion

I find that GRZ-S-01 and GRZ-G-09 are consistent with law, regulations, and policy. GRZ-S-01 is a process currently codified in existing regulation and GRZ-G-09 is a scientific process currently recommended for use in Arizona to estimate stocking rates.

I find that there may be some confusion as to how the stock and monitor approach may be used in evaluating stocking rates. Amend the guideline to clarify that stock and monitor is one form of adaptive management that may be utilized to determine whether adjustments are needed to authorized grazing levels.

Instructions

- Cite Smith et al. 2012 in the references cited section of the final EIS.
- Amend GRZ-G-09 by replacing “stock and monitor” with “adaptive management”, so that it states: *An adaptive management approach incorporating best available science should be used when evaluating stocking rates.*

Range of Alternatives for Livestock Grazing

Objection Summary

Sierra Club et al. state that the forest failed to analyze a range of reasonable alternatives for managing livestock grazing. The objectors cite 40 CFR 1500.2(e) and 1502.14 and states that the forest ignored viable action alternatives suggested in public comments. Specifically, the objectors claim the forest has refused to consider a "no grazing" alternative, as well as an alternative that would allow for voluntary permanent retirement of livestock grazing.

The objectors state that this lack of consideration of the no action alternative:

- Reveals a pre-determined outcome on the part of the forest that livestock grazing should be authorized as well as a pre-determined set of desired conditions.
- Leads to an inaccurate identification of the impacts of livestock grazing, including the long-term impairment of forest resources, increased fire risk, loss of watershed health, and increases in non-native invasive species and displacement of native wildlife, including harm to threatened and endangered species, which reduces the diversity of plan and animal communities’ forest wide.
- Fails to recognize the primary purpose of the creation of the forest, which is to provide water for the surrounding communities (final EIS, volume 1, pp. 144-422; volume 2, p. 69), due to the potentially irreparable harm grazing will inflict on watersheds.

The objectors claim other examples of inadequate range of alternatives, including:

- No difference in the estimated number of jobs or labor income attributed to livestock grazing (final EIS, volume 1, pp. 203-204).
- No variation in animal unit months (objector references the final EIS, volume 1, p. 206).

Sierra Club et al. references prior submitted comments on the draft EIS regarding the voluntary permanent retirement alternative (Western Watershed Project (p. 7)) and the Citizen's draft EIS comments (p. 69), claiming an insufficient response from the forest. The objectors assert that such

voluntary permanent retirement is legal and that there is ample precedent, such as in the following cases: designation of administrative areas, recreational areas, where mining may and may not occur, archaeological areas, bighorn sheep habitat, and protection for species listed under the Endangered Species Act.

Objectors' Proposed Remedies

- Withdraw the draft ROD, final EIS, and plan; provide a robust NEPA process that includes full consideration and analysis of a "no-grazing" alternative.
- Consider an alternative that would authorize the permanent retirement of grazing allotments that are voluntarily waived by the permittee.
- Close allotments that have already been vacated for resource protection, either through the Forest Service actions or through the voluntary relinquishment of grazing preference.

Assessment

The final EIS includes four alternatives analyzed in detail and seven alternatives that were considered but eliminated from detailed study. Three of the four alternatives considered reduced grazing through closure of vacant allotments. One alternative that was considered but eliminated from detailed study addressed no permitted livestock grazing (final EIS and draft ROD). Eliminating all grazing at a programmatic scale was not analyzed in detail because it would not be consistent with the National Forest Management Act and Multiple-Use Sustained-Yield Act, which directs the Forest Service to provide for multiple uses livestock use on National Forest System lands, including livestock grazing. Voluntary permit retirement was not considered because permittees can choose to waive their permit, but they have no authority to "retire" an allotment. The Forest Service retains discretionary authority to decide on the status of an allotment and whether to issue a new permit to a different livestock producer.

The final EIS (volume 1, p. 206) states:

> *While no variation in animal unit months is estimated across alternatives and therefore no changes in resulting jobs and income effects, plan components do differ across alternatives that would impact the range program and possibly the resulting economic contribution or the well-being of the ranching community.*

This is consistent with FSH 1909.17, chapter 10, section 11.1, which states that "some outputs and effects cannot be adequately valued in many planning situations and must be handled using constraints in developing planning alternatives, true measures of economic efficiency often cannot be obtained" (p. 1). The final EIS also acknowledge that alternatives B and C have the potential to reduce animal unit months through the analysis and closure of vacant allotments (final EIS, volume 1, p. 206). It also indicates that alternative D has the potential to increase animal unit months since vacant allotments would be granted to new permittees (final EIS, volume 1, p. 207).

Additionally, the land management plan contains GRZ-O-02 to evaluate at least one vacant allotment every two years for (a) conversion to forage reserve; (b) granted to current or new permitted livestock producer; or (c) closed to permitted grazing in whole or in part (plan, p. 42).

Conclusion

The forest considered a reasonable range of alternatives, including those considered but eliminated from detailed analysis. I find it reasonable that only those options that were consistent with applicable law, including the Multiple-Use Sustained Yield Act and the Forest Service range regulations at 36 CFR Part 222, were considered in detail. Within the range of alternatives, the effects of no grazing and the closure of allotments, following site-specific evaluation, were considered.

Instructions

None.

Grazing Allotment Boundary Changes

Objection Summary

Freeport-McMoRan raises concerns centered on allotment boundary changes when referencing the plan's Rangelands, Forage, and Grazing (GRZ) forest-wide direction (p. 41).

The objector contends that "allotment and pasture boundary changes could potentially impact grazing or other multiple use operations", and that "the Plan should state that stakeholder input will be obtained before boundary changes are made." The objector states that their prior comment on this section of the draft plan was not addressed sufficiently by the forest in the response to comments (final EIS, volume 3, p. 178, comment 2816-52) and identified as outside the scope of the plan, inconsistent with 36 CFR 222.2.

The objector also contends that new and updated content in the *Rangelands, Forage, and Grazing* section of the land management plan regarding the status of allotments, is inconsistent with the applicable regulations.

Objector's Proposed Remedies

None provided.

Assessment

The objector is concerned about additional information in the land management plan which states that the "status of allotments are dynamic, so a list of open, vacant, and closed allotments is subject to change." The same information is provided in volume II of the 2017 forest plan assessment and the 2022 final EIS. The Forest Service has broad authority by law to manage and regulate the use and occupancy of the national forests, including regulating where and how livestock grazing will occur. Allotment status and boundaries may change at the discretion of the forest based on various factors. Where the terms and conditions of a term grazing permit will be modified, the Forest follows the appropriate procedures in the Forest Service regulations and directives.

Permanent changes to the seasons of use, numbers, kind, and class of livestock allowed or the allotment to be used under a term grazing permit, because of resource condition, or permittee request (36 CFR 222.4), would be made as a permit modification. A responsible official's written decision to modify, suspend, or cancel a term grazing permit, issued under 36 CFR Part 222, Subpart A, is appealable under

36 CFR Part 214. Under 36 CFR 214.3, appellants "are limited to the holder, operator, or solicited applicants who are directly affected by an appealable decision, intervenors, and the responsible official."

The information that the objectors have issue with in the *Rangelands, Forage, and Grazing* section is provided as background information for the plan direction and does not dictate future projects or activities (plan, p.14).

Conclusion

I find that the forest plan is consistent with applicable law and regulations. The plan does not impose new or inconsistent procedures or requirements related to allotment boundaries and that the addition of new information in the *Rangelands, Forage, and Grazing* section is not expected to substantially change the effects of the proposed action and does not warrant a supplement to the EIS (40 CFR 1502.9(d)(4)).

Instructions

None.

Grazing Allotment Maps

Objection Summary

Sierra Club et al. state that information provided to the public is inadequate because the forest has not provided grazing allotment lists or maps. The objector notes this information was requested in the 2018 comments submitted by the Western Watersheds Project. Without this information, the objectors claims that the public was not provided with a clear understanding of how widespread livestock grazing is on the forest nor the extent of impacts on recreational experiences.

Objectors' Proposed Remedy

Withdraw the ROD, EIS, and plan. Conduct a NEPA process that provides all the information necessary for an adequate public review and comment.

Assessment

Nearly the entire forest is in a grazing allotment; therefore, livestock grazing is widespread across the forest. The plan provides guidelines for livestock grazing in heavy use recreation areas – specifically the Lakes and River Management Area (p. 158):

- *LRMA-G-05: Permitted livestock grazing should not be authorized in the Lakes and Rivers Management Area except where existing infrastructure or natural boundaries prevent livestock from accessing the rivers and lakes.*
- *LRMA-G-06: Permitted livestock should not be authorized to cross the Verde River except where necessary and authorized in allotment management plans.*

The forest did not provide a map or list in the land management plan because the status of allotments is dynamic and subject to change (plan, p. 41). The requested map of active, vacant, and closed allotments is available on the public facing web page in volume II of the 2017 forest plan assessment and was available to reviewers during comment periods.

The recreation section of the final EIS (p. 85) discloses the effects of grazing allotments on the quality of recreation experience, should vacant allotments become closed or active following evaluations. The recreation experience would not change on active allotments.

Conclusion

I find that the forest disclosed that livestock grazing is widespread on the forest and a map of grazing allotments is not required in the plan or EIS. The plan includes guidelines to limit livestock grazing in heavy recreation use areas (rivers and lakes management area) and analysis in the final EIS is sufficient.

Instructions

None.

Long-Term Impacts from Grazing

Objection Summary

Sierra Club et al. contend that the plan fails to set clearly defined goals and metrics that will protect natural resources from grazing impacts over the next decade, particularly in the face of continuing drought and increasing fire on the landscape in the southwest. The objectors also assert that the management prescriptions for Rangelands, Forage, and Grazing are largely unchanged from the draft plan, despite the objectors' prior submitted comments on the draft.

Objectors also contend that the forest does not justify the use of Bureau of Land Management monitoring methods (cited as Dickard et al. 2015), over the forest's previously used stream assessment method.

Objectors' Proposed Remedies

- Amend the plan to include additional goals and metrics to achieve actionable results on a timely basis.
- Include plan language to prohibit all livestock facilities in riparian areas.

Assessment

The final EIS states that current grazing practices are much improved from historic practices that had significant adverse effects on herbaceous surface vegetation, cover, composition, and diversity on the forest, but still include grazing within ecological response units with few adaptations for it (p. 273). To provide sustainability of rangelands, the plan provides direction to evaluate livestock grazing in and around riparian areas on an allotment-specific basis and add allotment-specific design elements such as deferment, herding, and fencing where needed. Evaluation of livestock use on an allotment specific basis is completed through the development of allotment management plans. Further, the forest developed the plan holistically where "integrated resource management recognizes the interdependency of ecological, social, cultural, and economic resources and how management of one resource can influence the management or condition of other resources" (plan, p. 17). The 106 allotment-specific evaluations will emphasize drought preparedness and include review and revision of allotment management plans (final EIS, volume 3, p. 239, comment 2970-481).

Livestock numbers, class, pasture timing, and grazing intensity are adjusted to respond to changing environmental or social and economic needs. In some years, full permitted numbers are authorized; in other years, reduced numbers are authorized to respond to changed conditions such as drought or fire (final EIS, p. 144). Currently, the forest manages the rangeland resources to balance livestock numbers with forage capacity. Within the scope of the allotment grazing decisions, fine-tune adjustments are made through annual operating instructions informed by monitoring and allotment inspections (land management plan, p. 41). Annual authorized use varied between 2005 and 2015 and was below permitted use in 2015 (2017 forest plan assessment, volume II, pp. 70-71).

The plan includes desired conditions for riparian areas exhibiting low departure from reference conditions that are functioning properly and resilient to disturbance. The plan also includes a desired condition that livestock grazing not impact the long-term health of riparian vegetation with low departure from desired conditions (plan, p. 113). Varying by riparian ecological response units (RERU), 8-26 percent of riparian stream conditions are stable with the remaining stream conditions impaired or unstable (2017 forest plan assessment, volume I, p. 177). Riparian area conditions of high moisture content of forage, cool temperatures, and available water, causes concentration of herbivore use in riparian areas and can lead to the overuse of vegetation necessary to protect streambanks from the effects of high flows (final EIS, p. 401). The 2017 forest plan assessment and the planning record do not identify whether current grazing practices are contributing to the current conditions, if streams are trending towards desired conditions, or if there are allotment specific priorities.

Dickard et al. (2015) is a peer reviewed protocol for assessing stream condition initially published by the Bureau of Land Management in 1998 and revised in 2002 and 2015 with contributions from the Forest Service and Natural Resources Conservation Service.

Conclusion

I find the forest's use of site-specific allotment metrics are appropriate tools for providing sustainability of rangelands on the forest, and are consistent with the 2012 planning rule and grazing decisions. These site-specific metrics are developed in allotment management plans and annual operating instructions that inform fine-tuned adjustments in stocking rates to adapt to changing conditions (including drought and fire). The forest plan identifies that site-specific adjustments to allotment management is done through permit administration and that the plan's desired conditions provide the direction to determine when changes in management are needed (plan, p. 41).

I find that additional plan components are not needed because the existing plan components, combined with the Forest Service's range policy, provide a framework for administering permits and making adjustments based on the site-specific allotment evaluations. There is also no need for plan direction to prohibit facilities in riparian areas because livestock facilities in riparian management zones would be designed and/or managed to maintain or restore desired conditions for long-term natural streambank stability, native vegetation, floodplain, and soil functions.

Instructions

- Provide clarity in the final EIS about how improved grazing practices and improved resource conditions described in the final EIS on page 273 will provide for the long-term sustainability of rangelands.

- Add *Term Grazing Permit Issuance Authorities Review and Guidance* to the planning record.

Grazing Suitability Analysis and Consideration of Grazing Capability

Objection Summary

Sierra Club et al. and Jeffrey Burgess assert that the forest violates NEPA by issuing grazing permits and making important grazing management decisions on allotments without conducting suitability analysis or meeting public participation requirements and by deferring site-specific analysis to an "aspirational" revision of the forest's allotment management plans.

Objectors' Proposed Remedies

Sierra Club et al.:

Revise the plan to prohibit grazing in sensitive areas, including all riparian areas, and include an analysis of grazing capability and suitability.

Jeffrey Burgess:

Initiate the NEPA public planning process before making any administrative decisions to permit grazing on a vacant allotment.

Assessment

The planning rule does not require a rangeland suitability analysis during forest planning. 36 CFR 219.7(e)(1)(v) states that the "suitability of lands need not be identified for every use or activity. Suitability identifications may be made after consideration of historic uses and of issues that have arisen in the planning process." The response to comments stated that "the 2012 Planning [Rule] does not require capability or suitability for livestock grazing." The final EIS, draft ROD, and plan did not address whether suitability for areas were reconsidered based on issues raised during the planning process.

Volume 1 of the final EIS (p. 12) identified grazing and rangeland management as one of the five significant issues that drove alternative development. FSH 1909.12, chapter 10, section 13.32 guiding the Assessment indicates that the interdisciplinary team should identify and evaluate available information about range conditions, levels of grazing activity, the capability and productivity of the plan area to support grazing, the impacts of grazing on ecological integrity and species diversity, and the contribution of grazing in the plan area to social, economic, and ecological sustainability. The forest completed this in the assessment for plan revision; this information was incorporated by reference in the final EIS on pages i-ii. While the forest did not conduct a suitability analysis, suitability is implied when grazing is compatible with the desired conditions of an area. A grazing permit is required to authorize grazing on National Forest System lands (36 CFR 222.3(a)). The term permit provides for the occupancy and use of National Forest System lands for the purpose of commercial livestock production. This authorization is defined using the term "head month" to specify the amount of occupancy and associated use that will be allowed under the permit. Grazing fees are based on the number of head months of grazing that are authorized on a given grazing year. The Forest Service does not authorize grazing based on animal unit months (AUM). The response to comment (final EIS, volume 3, p. 159, comment 2986-15) stated that "Animal Unit-months are simply a statistic to quantify an amount of grazing." An animal unit month does not demonstrate forage availability or productivity.

In reference to Sierra Club et al.'s request to revise the plan to prohibit grazing in sensitive areas and include an analysis of grazing capability and suitability in the final EIS, a plan does not authorize projects or activities or commit the Forest Service to take action. A plan may constrain the agency from authorizing or carrying out projects and activities, or the manner in which they may occur. Projects and activities must be consistent with the plan (36 CFR 219.15). A plan does not regulate uses by the public, but a project or activity decision that regulates a use by the public under 36 CFR Part 261, Subpart B, may be made contemporaneously with the approval of a plan, plan amendment, or plan revision. Plans should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directives System.

In response to Jeffrey Burgess's request to initiate the NEPA public planning process before making administrative decisions to permit grazing on a vacant allotment, where NEPA is needed because NEPA has not been completed or there have been significant changes since the previous NEPA was completed, the forest will complete NEPA and ensure compliance with other applicable laws prior to issuing a grazing permit. The timing and scope for preparing this future site-specific analysis is not part of the forest plan. Vacant allotments were considered during the planning process. The requested map of active, vacant, and closed allotments is available on the public facing web page in volume II of the 2017 forest plan assessment and was available to reviewers during comment periods.

Conclusion

I find the forest followed the 2012 planning rule by not completing a grazing suitability analysis. I also find that the forest did not provide clear documentation for how they considered available information about the capability and productivity of the plan area to support grazing as recommended in FSH 1909.12, chapter 10, section 13.32.

Instructions

- Clarify in the final EIS that when monitoring does not indicate progress toward desired future conditions, that adjustments would be made through permit administration to manage toward the desired conditions and align with the sustainability requirement of the planning rule.
- Clarify in the record how available information about capability and productivity of the plan area was considered.

Sustainable Grazing

Objection Summary

Sierra Club et al. allege that the land management plan and ROD perpetuate a myth of "sustainable livestock grazing", which is not based on the best available scientific information.

The objectors point to prior submitted comments on the draft EIS on this issue (Western Watersheds Project, pp. 2-3), claiming grazing on public lands is unsustainable in the following ways:

- Economically - "operates at a profound financial public deficit"; and
- Ecologically - "has converted and degraded entire landscapes"; and
- Hydrologically - "converts thousands of gallons of potable water into sewage every year"; and
- Climatically - "produces greenhouse gasses at levels that exceed other forms of agriculture"; and

- Nutritionally - "results in a product that is demonstrably averse to human health when ingested frequently or in high amounts."

Further, the objectors contend that removing top predators from the landscape to make it safe for untended livestock negatively impacts native wildlife species such as the Mexican gray wolf, coyote, cougar, and black bear.

The objectors also state that the final EIS does not include discussion of how "well-managed" livestock grazing (as opposed to "long-past unregulated grazing") exacerbates fire regimes, invasive species, loss of species diversity, and degrades watersheds. The objectors claim the forest's response to prior comments submitted on the grazing analysis on this matter were insufficient.

Lastly, the objectors dispute that "sustainable and productive rangelands are one of the key ecosystem services on the [forest]" (land management plan, p. 41), stating that "grazing permittees instead ***utilize*** the ecosystem services of the Tonto National Forest at a greatly reduced cost compared to those same services found on privately owned and managed lands and grazing on arid lands in the Southwest is unsustainable" (emphasis in original).

The objectors cite regulations at 36 CFR 219.3 and 219.7(e)(1)(v).

Objectors' Proposed Remedy

Apply the best available scientific information to determine which areas of the forest are suitable for livestock grazing and which are not, then determine what is really, "sustainable" livestock grazing.

Assessment

The forest identifies sustainable and productive rangelands as a key ecosystem service in the draft ROD and final EIS, consistent with 36 CFR 219.8. This is defined by the forest as "seeking a balance between forage production, livestock products, and other ecosystem services, including wildlife and recreation, through adjustments in permitted numbers and the implementation of improved management practices" (2017 forest plan assessment, volume II, pp. 63-64).

Livestock grazing began in the late 1800s with livestock numbers peaking about 1900 with an estimated 1.5 to two million head (final EIS, volume 1, p. 143). Permitted livestock use has decreased over time to reduce the effects of historic overgrazing and in response to climate fluctuations. Currently, about 25,000 cattle are permitted to 85 livestock operators (final EIS, volume 1, p. 144). Annually, the forest's grazing program contributes an estimated 530 jobs and 8,581,000 dollars to local communities (final EIS, table 47, p. 193).

The planning rule requires that "when developing plan components, the Responsible Official shall take into account range that contributes to local, regional, and national economies in a sustainable manner (36 CFR 219.8(b)(3)) and consider forage, grazing, and rangelands (36 CFR 219.10 (a)(1))." The plan may also include "Standards or guidelines, such as seasonal closures or restrictions based on forage condition, to maintain the ecological sustainability and the sustainability of forage for grazing." The responses to Long-Term Impacts from Grazing, Grazing Suitability Analysis and Consideration of Grazing Capability, and Riparian Area Protections from Livestock provide direction on the ecological sustainability of plan components.

Lastly, in regard to removing predators to protect livestock. The response to comments (final EIS, volume 3, p. 159, comment 2986-5) provides the following response regarding predator control:

> *The Forest Service does not conduct any top predator control. For information on how large mammal populations are managed in Arizona, contact Arizona Game and Fish Department.*

Conclusion

I find that the forest has demonstrated consistency with the definition of sustainability at 36 CFR 219.19. The forest appropriately defined and analyzed economic sustainability by providing the public some capability to produce and consume or otherwise benefit from permitted livestock grazing, including provisioning services such as forage for livestock grazing/production, contributing to job and market benefits. In addition, the forest appropriately defined and analyzed social sustainability by supporting the network of relationships, traditions, culture, and activities that connect people to the land and to one another and support vibrant communities.

Instructions

None.

Targeted Grazing

Objection Summary

Sierra Club et al. claim that the public has not had an opportunity to review and comment on controversial grazing provisions added between the draft and final plan. Specifically, the objectors highlight GRZ-G-09, claiming it is similar to an outcome-based grazing model and was not disclosed, analyzed, or discussed in the draft Plan or draft EIS. Additionally, the objectors claim targeted grazing is scientifically controversial and inappropriate.

Objectors' Proposed Remedy

Revise the plan and EIS to remove all "targeted grazing" management approaches, including GRZ-MA-11 and INS-MA-14.

Assessment

The plan content referenced by the objector includes:

- *GRZ-G-09: A stock and monitor approach incorporating best available science should be used when evaluating stocking rates in grazing decisions.*
- *GRZ-MA-11: Consider targeted grazing to reduce high fuel loading.*
- *INS-MA-14: Consider using targeted grazing to control invasive species and fuel loading, where appropriate.*

GRZ-G-09 was added to the final plan to respond to public comments (40 CFR 1503.4(1)). The objector's concern is that the "draft environmental impact statement used flawed assumptions and failed to address key aspects of livestock grazing including historical impacts to natural resources, changes to habitat of native predators, and suitability and capability" (final EIS, volume 3, p. 159, concern 172). This guideline states that "A stock and monitor approach incorporating best available scientific information should be used when evaluating stocking rates in grazing decisions," and was developed to allow the

unit to analyze the appropriate information for site-specific projects (final EIS, volume 3, p. 159, comment 2986-15). A guideline allows departure from its terms, provided the purpose of the guideline is met (36 CFR 219.7(e)(1)(iv)). In this instance the purpose is to use best available scientific information in evaluating stocking rates for authorized grazing .

As it relates to the use of targeted grazing as identified in GRZ-MA-11 and INS-MA-14, the plan does not direct that targeted grazing must be used, nor does it site-specifically authorize its use (36 CFR 219.2(b)(2)). Rather, the plan suggests that the forest consider targeted grazing as a tool (pp. 43, 205, and 212), and appropriately identifies it as a management approach. Using livestock grazing to address an invasive species infestation is considered a biological control as part of FSM 2900, zero code requirements to use an integrated pest management approach to prevent, control, and eliminate priority infestations of invasive species in aquatic and terrestrial areas of the National Forest System. Targeted grazing is a tool that was analyzed and authorized for use in the forest's environmental assessment and decision notice for noxious and invasive plants treatment (USDA 2012). Page 4 of the decision notice states that "if grazing animals are used for biocontrol, impacts of the action will either be evaluated in a new analysis or authorized according to an existing grazing permit."

The objectors claim that the public did not have an opportunity to comment on the targeted grazing management approaches. The plan does not authorize the use of targeted grazing. Just as the forest provided an opportunity for the public to comment on biological control targeted grazing as an integrated pest management approach during the planning process for the integrated treatment of noxious or invasive plants environmental assessment, future site-specific actions would be subject to applicable NEPA and public review and comment.

Conclusion

I find GRZ-G-09 was added in response to comments (40 CFR 1503.4) between the draft and final EIS; however, it did not constitute a significant change to the proposed action. Therefore, the change does not require a supplemental EIS (40 CFR 1502.9(d)(4)). Further, the use of targeted grazing on the forest has been adequately analyzed.

However, I am providing an instruction to the forest to modify and clarify the intent of this guideline.

Instructions

Amend GRZ-G-09 by replacing "stock and monitor" with "adaptive management", so that it states: *An adaptive management approach incorporating best available science should be used when evaluating stocking rates.*

Livestock Trespassing

Objection Summary

Sierra Club et al. states that the forest fails to adequately address trespassing livestock, including factoring this into the cumulative effects analysis. The objectors highlight prior submitted comments on the draft EIS (Western Watershed Project, pp. 3-5), which they state shows the forest's inability to ensure livestock remain where they are authorized.

Objectors' Proposed Remedy

Revise the EIS to address the impacts of trespassing cattle.

Assessment

The plan provides guidelines that prohibit unauthorized and excess grazing consistent with Forest Service regulations. Per GRZ-G-08, only livestock under permit will be allowed to graze the forest.

Unauthorized livestock is already addressed outside of the forest plan, and the forest plan need not repeat existing law and regulations. Unauthorized grazing is prohibited and subject to fines and penalties under 36 CFR 261.7. Where unauthorized or excess grazing is identified in association with a permittee or term grazing permit, the forest will contact the permittee and, if needed, issue a notice of noncompliance and pursue administrative remedies, up to and including suspension or cancellation of the permit in whole or in part pursuant to 36 CFR 222.4. The Forest Service also has authority to impound and remove unauthorized livestock under 36 CFR 262.10. All incidents of unauthorized livestock where an owner can be identified will also be documented and assessed grazing fees at the unauthorized use rate, except in limited circumstances as provided by regulation (36 CFR 222.50(h)).

Conclusion

I find that the forest disclosed effects of unauthorized use would be minimal since livestock owners would be requested to immediately remove the livestock. Regulations are in place to address potential incidents and plan guidelines provide consistent direction. However, additional clarification regarding unauthorized livestock and excess use could be provided.

Instructions

- Update GRZ-G-08 to apply to both unauthorized livestock (livestock grazing the forest owned by someone not holding a grazing permit) and excess use (livestock owned by someone hold a grazing permit but outside the authorized allotment, season of use, or in greater numbers), as 36 CFR 222.50(h) requires documentation and billing for both situations.
- Add a footnote that states:

  Unauthorized livestock are both livestock grazing the forest owned by someone not holding a grazing permit and livestock owned by someone hold a grazing permit but outside the authorized allotment, season of use, or in greater numbers.

Livestock Grazing Utilization Limits

Objection Summary

Sierra Club et al. and Jeffrey Burgess assert that the forest fails to set appropriate livestock grazing utilization limits.

Mr. Burgess states that there is no description of what the forest considers to be "conservative use levels" (referencing the plan, p. 41, paragraph 5), and that maximum forage utilization guidelines, typically set in allotment management plans or annual operating instructions, are not readily available to the public, making it difficult to know what utilization guidelines are being used. Burgess also claims

the forest failed to consider the unique grazing habits of cattle in desert allotments and competition with mule deer.

Sierra Club et al. references prior submitted comments on the draft EIS (the 2020 "Citizen's DEIS comments", p. 59), wherein they noted that the forest has many ecological response units (ERUs) that are functioning poorly and not achieving desired conditions due to livestock grazing and drought.

Objectors' Proposed Remedies

Jeffrey Burgess

- Identify specific and conservative allowable upland forage utilization limits for herbaceous vegetation.
- Recognize that "brush grazing" of woody vegetation is a result of the overgrazing of herbaceous desert vegetation.
- Prohibit grazing on pastures comprised of Sonoran Desert during the hot summer months.
- Require that Reading the Range program forage utilization monitoring data be publicly available on the internet.
- Require that the forest annually post PDF copies of the annual operating instructions for all its active grazing allotments to its website.
- Require that the forest post PDF copies of all current grazing allotment management plans to its website.

Sierra Club et al.

- Include a standard that limits utilization for livestock grazing.

Assessment

Standards and guidelines programmatically provide sideboards for the development of allotment management plans where utilization levels and other measures could be selected and implemented as needed, including the following components from the plan:

- *GRZ-S-01: Livestock use in and around riparian areas will be evaluated on an allotment-specific basis. Design elements (e.g., deferment, herding, and fencing) will be implemented where needed.*
- *GRZ-G-03: Drought preparedness should be emphasized in allotment management plans and may include flexible stocking rates/livestock classes, flexible rotation schedules, and other strategies for dealing with climate variability.*
- *GRZ-G-04: Livestock rotations should avoid grazing the same areas during the growing season at the same time, year after year.*
- *RERU-G-02: Livestock management practices should allow riparian vegetation to recover. Plant development or recovery sufficient to sustain healthy riparian areas should occur following each livestock use period.*
- *RERU-G-03: Projects and activities should be designed and implemented to promote a diversity of age classes and natural succession of native riparian and wetland obligate species (e.g., cottonwood, willow, sycamore, ash, alder, sedges, grasses, and other wetland plants).*

As discussed in the response to comments, grazing utilization has not been incorporated into the land management plan and will continue to be assessed site-specifically at the allotment level (final EIS, volume 3, p. 169 (comments 2808-5, 2986-17, and 2970-65); p. 170 (comments 23-3, 2463-7, and 10); p.

177 (comment 2970-650)). A plan does not authorize projects or activities or commit the Forest Service to take action (36 CFR 219.2(b)(2)). Term grazing permits, and associated allotment management plans, are the appropriate instrument to analyze utilization levels (36 CFR 222, 36 CFR 214.4, and FSH 2209.13, chapter 90).

The objectors also requested that the forest make the following information publicly available on their website:

- Reading the Range program forage utilization monitoring data.
- Annual operating instructions (AOIs) for all of its active grazing allotments to its website.
- Current grazing allotment management plans (AMPs)

The information that objectors requested be posted online is available through the Freedom of Information Act (FOIA) and is not a commitment connected to the land management plan or plan revision process but rather is tied to program management on the forest.

Grazing in desert ecological response units was a topic of discussion for the forest throughout the plan revision process. The 2017 forest plan assessment, 2017 preliminary proposed plan, and the first technical partner meeting summary document this concern in the planning record. However, this information was not referenced in the response to comments (final EIS, volume 3). The rationale for not including plan components to restrict grazing in desert ecological response units was discussed (final EIS, volume 3, p. 172, concern 199), but it was not presented in a cohesive way. The response to comments does not clearly explain why restrictions on grazing in the desert are not needed or warranted.

Regarding mule deer, the forest discussed in the *Rangelands, Forage, and Grazing* section of the final EIS that some of the alternatives may increase forage for both livestock and other herbivores. This lumping of forage availability for livestock and other herbivores is necessary because multiple species use the forage resource, and it is available to all. Similarly, when browse impacts are observed that would trend away from desired conditions, livestock are moved regardless of which species or group of species is contributing the most. The *Desert Ecological Response Units* section of the final EIS also discussed how the alternatives may affect herbaceous species.

Conclusion

I find that, consistent with policy at FSH 1909.12, chapter 20, section 23.22, the forest deferred utilization limits to the more appropriate level of allotment management plans. Requests for web posting the annual operating instructions, allotment management plans, and reading the range monitoring results are outside the scope of the land management plan. However, I find that the planning record does not provide clear rationale for not including plan components to restrict grazing in desert ecological response units.

Instructions

- Provide rationale in the ROD for why plan components to restrict grazing in desert ecological response units were not included in the plan.
- Add a review of Smith 1993 and Rosiere 1975 to the planning record.

Grazing Assessment Methodology

Objection Summary

Sierra Club et al. claim that the plan employs a faulty assessment methodology; measuring utilization is inappropriate for the forest. The objectors highlight RMZ-G-05, in particular the 50 percent utilization rate in the guideline.

More generally, the objectors state that measuring utilization is inappropriate for the forest, citing Lamar et al. 2007, given that such methods were developed for perennial grasses and are not suited for the plan area. The objectors further claim that measuring utilization has no value to evaluating effects of grazing on federally proposed and listed and endangered species and their critical habitats.

Lastly, the objectors are concerned that grazing permittees are conducting monitoring on their own allotments, citing concerns with the "Reading the Range" program.

Objectors' Proposed Remedy

Revise the final EIS to justify how the "Reading the Range" program fits with monitoring and adaptive management procedures on the forest.

Assessment

The plan component referenced by the objector includes:

> *RMZ-G-05 (from the draft plan): Annual operating instructions should schedule pasture use to achieve 50 percent utilization of current year's growth on riparian woody/browse species and 50 percent utilization of herbaceous vegetation within the riparian management zone.*

The objectors expressed concerns with RMZ-G-05 from the draft plan. However, as found in the final EIS response to comment, the forest removed RMZ-G-05 from the plan. The forest documented the intent that "Grazing utilization has not been incorporated into the forest plan and will continue to be assessed at the allotment level as that is where site-specific analysis is conducted," and the inclusion of the utilization guideline was "accidentally included in the draft plan" (final EIS, volume 3, p. 168, comment 23-4). This change is consistent with 36 CFR 222, 36 CFR 214.4, and the Southwestern Region's FSH 2209.13, chapter 90, which directs that term grazing permits, and associated allotment management plans, are the appropriate instrument to modify grazing management.

The use of Reading the Range began on the forest in 2001, where the "monitoring program now includes 57 allotments encompassing 1.48 million acres on the Tonto National Forest" (2017 forest plan assessment, volume II, p. 75). The plan includes a management approach which states that the forest will "work with partners (e.g., University of Arizona and Friends of the Tonto) to complete rangeland monitoring using currently accepted protocols (e.g., Reading the Range and riparian photo points)" (GRZ-MA-06). "Management approaches may discuss potential processes such as analysis, assessment, inventory, project planning, or monitoring" (FSH 1909.12, chapter 20, section 22.4). The plan does not direct that Reading the Range must be used, nor does it site-specifically authorize its use (36 CFR 219.2(b)(2)). Rather, the plan suggests that the forest consider Reading the Range as the currently accepted protocol for rangeland monitoring.

FSM 2200, zero code, section 2204.2 states that regional foresters have the authority to establish regional standards and guidelines for evaluating and monitoring management systems and range analysis. That said, it is unclear if the forest's Reading the Range program relies on regional standards and guidelines or university publications.

Conclusion

I find that the removal of RMZ-G-05 between draft and final EIS addressed the concerns of the objectors related to utilization within riparian areas, and the change is consistent with 36 CFR 222, 36 CFR 214.4, and Southwestern Region's FSH 2209.13, chapter 90.

I find the forest references Reading the Range as a tool for rangeland monitoring, which is appropriate for inclusion in a management approach. However, the forest should clearly document how the Reading the Range program is consistent with direction outlined in FSH 2209.13, chapters 20 and 30, and Southwestern Region's FSH 2209.13, chapter 40.

Instructions

Document how the methodology and protocol for rangeland monitoring (e.g., the Reading the Range program) is consistent with FSH 2209.13, chapters 20 and 30, and Southwestern Region's FSH 2209.13, chapter 40.

Annual Operating Instructions

Objection Summary

Sierra Club et al. states that the plan fails to include management approaches for annual operating instructions. Objectors references the "best practices" recommendations they submitted as part of their comments on the draft EIS (Western Watersheds Project, pp. 15-16). The objectors further allege that the forest inappropriately dismissed them as outside the scope of the plan revision.

Objectors' Proposed Remedy

Incorporate the recommended management approaches for annual operating instructions into the land management plan.

Assessment

Management approaches describe an approach or strategy to help achieve desired conditions (36 CFR 219.7(f)(2); FSH 1909.12, chapter 20, section 22.4). They are not plan direction and therefore not binding, as is described in the plan on page 14:

> *Management approaches do not offer plan direction but describe an approach or strategy to manage the unit to achieve a desired condition. Management approaches often convey how plan components work together to achieve the desired condition. They may also describe context, intent, priorities, partnership opportunities and coordination activities, or future inventories or assessments. Not every resource topic area has a management approach heading as they are not required or a plan component. Changes to management approaches do not require plan amendments.*

The objectors would like the land management plan to include management approaches for annual operating instructions. This concern was brought up in comments and addressed by the forest as outside the scope of plan revision (final EIS, volume 3, pp. 157-158, 175-176, 241-242, 247, and 348).

Annual operating instructions and term grazing permits work in conjunction with each other when it comes to grazing management. The forest includes language in the plan on page 41 as it relates to the use of annual operating instructions, stating:

> *Fine-tune adjustments are made annually through the annual operating instructions. Information from monitoring such as frequency plots, canopy cover, pace frequency transects, photo points, and allotment inspections inform appropriate adjustments. Grazing intensity in combination with other factors such as weather patterns, likelihood of plant regrowth, and previous years' utilization levels, is used in determinations. Authorized numbers may be adjusted up and down according to the grazing decision, implemented through the term grazing permit. The annual operating instructions may also adjust season of use, salt locations, and pasture rest periods.*

Permanent grazing management modifications are authorized through the term grazing permit. Annual operating instructions allow for temporary adjustments while implementing the terms and conditions of a term grazing permit. Annual operating instructions do not constitute a permit modification and are not an appealable decision (36 CFR 214.4). Both annual operating instructions and term grazing permit modifications are outside the scope of plan revision.

FSH 2209.13, chapter 90 (pp. 6-7) describes a two-part decision to be made for authorizing livestock grazing:

> *1. Whether livestock grazing should be authorized on all, part, or none of the project area. 2. If the decision is to authorize some level of livestock grazing, then what management prescriptions will be applied (including standards, guidelines, grazing management, and monitoring) to ensure that desired condition objectives are met or that movement occurs toward those objectives in an acceptable timeframe.*

The handbook continues to describe a grazing proposed action (p. 7):

> *A proposed action that includes authorization of livestock grazing shall also include the basic elements of an allotment management plan (AMP) (sec. 94.1) because these elements will ultimately be obtained directly from the NEPA-based decision and will be included in part 3 of the grazing permit…as an allotment management plan. Both the issuance of the permit and the development or amendment of an allotment management plan that becomes a part of the permit is considered an administrative action that implements the NEPA-based decision (sec.* 94).

Conclusion

I find that including management approaches for annual operating instructions would not be consistent with the programmatic nature of a forest plan. However, I find that the response to comments (final EIS, volume 3, p. 169, concern 192) incorrectly states that changes to livestock numbers can only be made during allotment planning.

Instructions

- Update the planning record to clarify that allotment grazing management modifications may be made through allotment management plans, term grazing permits, and/or annual operating instructions, all of which are done at the site-specific level and outside the scope of a forest plan.
- Update the introduction of the *Rangelands, Forage, and Grazing* section of the plan (p. 41) to clearly explain that adjustments are made within the bounds of site-specific NEPA decisions.
- Remove reference to the Recissions Act of 1995, which is no longer applicable.

Escape Ramps and Stock Tanks

Objection Summary

Sierra Club et al. claim the forest arbitrarily and capriciously ignored recommendations previously submitted by the objector regarding plan components for grazing. The objectors specifically highlight their recommendation to install wildlife escape ramps in all troughs and open tanks, stating that forest's response (final EIS, volume 3, p. 159, comment 23-25) was inadequate. In response to the forest's assertion that escape ramps and stock tanks were installed years ago and that the issue is one of maintenance, the objectors state that, in that case, GRZ-G-04 should be changed.

Objectors' Proposed Remedy

Incorporate the objectors' previously submitted recommendations for GRZ-DC, GRZ-O, and GRZ-G, and remove all references to "sustainable" livestock grazing, management, and operations.

Assessment

The plan component referenced by the objector includes:

> *GRZ-G-04: Livestock rotations should avoid grazing the same areas during the growing season at the same time, year after year.*

40 CFR 1503.4 states that an agency preparing a final EIS shall consider substantive comments and may respond by modifying alternatives, including the proposed action; developing and evaluating alternatives not previously given serious consideration; supplementing, improving, or modifying its analyses; making factual corrections; and explaining why the comments do not warrant agency response.

The response to comments (final EIS, volume 3, p. 161, comment 2970-658) provides the following response to comments regarding sustainability of livestock grazing:

> *Grazing is one of the multiple uses identified in the Multiple Use and Sustained Yield Act. Plan components related to livestock grazing can be found in revised plan (chapter 2, Riparian Areas, Seeps, Springs, Wetlands, and Riparian Management Zones) section and throughout other resource areas in chapters 2 and 3. The Forest Service believes that sustainable grazing is possible and is why it was included as a desired condition. The Forest Service believes that livestock grazing can be conducted in a sustainable manner; therefore, a desired condition was*

developed that expresses that livestock grazing can be conducted in a sustainable manner; therefore, a desired condition was developed that expresses that.

The response to comments (final EIS, volume 3) provides the following responses to escape ramp related comments:

Most troughs and tanks currently have wildlife escape ramps. But they can become damaged, removed, or lost. This objective provides direction to ensure all tank and troughs have ramps. (p. 178, comment 2806-11).

There are plan components in the Wildlife, Fish, and Plants section of the revised plan (chapter 2) that address the commenter's concerns, including the following guideline: new or reconstructed features (e.g., fences, vent pipes, stock tanks, and culverts) should be designed, constructed, and maintained to minimize wildlife mortality (e.g., capped fence posts and escape ramps). (p. 179, comment 2736-41 and 2948-21).

…We will continue to use the best available science as we add or replace wildlife escape ramps, along with working with partners. (p. 179, comment 2948-20).

Per the revised plan (chapter 1 Plan Components and Other Plan Content, Plan Components), objectives are concise, measurable, and time-specific statements of a desired rate of progress toward desired conditions and should be based on reasonably foreseeable budgets. Objectives, along with the strategies (from management approaches or Forest Service handbook direction) used to accomplish them, can be thought of as the tools we will use to prioritize project activities to reach desired conditions. Objectives are mileposts along the road toward desired conditions. Most troughs and open stock tanks already have wildlife escape ramps. Locating and identifying any tanks missing ramps can be time consuming. Although we are setting an objective to fit at least 2 tanks per year, as many tanks as we are able to will be fitted each year. Nothing prohibits us from accomplishing more than what we identify in plan objectives. (p. 182, comment 2986-97).

All of the tanks and troughs on the Tonto National Forest have been fitted with wildlife escape ramps for many years. Like all range improvement, escape ramps require maintenance. This objective the commenter references was developed to ensure that all tanks and troughs always have a functional wildlife ramp. (p. 185, comment 2970-664).

Part 3 of term grazing permits includes responsibilities for construction and maintenance of structural improvements, such as tanks and troughs.

As documented in the response to comments (final EIS, volume 3, pp. 1-2), the forest considered public comments in accordance with 40 CFR 1503.4 (a):

Each unique letter was read, and substantive formal comments were identified and coded by resource area and concern topic. The substantive comments and their coding were entered into the Content Analysis and Response Application (CARA) database, which enabled reports to be run listing all the substantive comments by topics and concern. Once the unique and substantially different comments had been coded, the concerns raised by different commenters on the same subject and with the same intent were grouped together. Resource specialists

combined similar comments into concern statements that captured the intent of the commenter(s). They are called the comment concern statements and this appendix includes 366 of them. For this reason, even though not every comment is displayed in this appendix exactly as written by each respondent, each comment was considered individually.

The comment concern statements are followed by the comment responses prepared by the plan revision interdisciplinary team. This team prepared responses for each comment based on its merits, regardless of the source or whether the comment was expressed by one person or by many. Each substantive comment was considered and responded to and is available in the administrative record for this project.

In considering the comments, it is important for readers and decision makers to understand this process makes no attempt to treat input as if it were a vote. Instead, the content analysis process focuses on the content of the comments and ensures that every comment is considered in the decision process. In addition, non-substantive comments can include those that are unrelated to the decision being made; already decided by law, regulation, or policy; beyond the scope of the proposal; conjectural in nature or not supported by scientific evidence; or general in nature or position.

The Tonto National Forest responded to public comments by:

- *Modifying the land management plan and the alternatives in the environmental impact statement, where appropriate.*
- *Developing or analyzing alternatives not given detailed consideration in the draft environmental impact statement.*
- *Supplementing, improving, or modifying the analysis that the final environmental impact statement.*
- *Making factual corrections; and/or*
- *Explaining why the comments needed no response.*

Conclusion

I find that the forest met the requirements of 40 CFR 1503.4 for considering and responding to comments identified in this objection. Specifically, the forest provided rationale for why the objectors' suggested change to the GRZ-G-04 was not adopted in response to comments (final EIS, volume 3, pp. 185, 330-331; comments 2970- 500, 501, and 664). Other plan components suggested by the objectors were not incorporated into the final plan because they were redundant with existing plan components or law, regulation, and policy.

As documented in the response to comments (final EIS, volume 3, pp. 1-2), the forest considered public comments in accordance with 40 CFR 1503.4 (a). Multiple plan components in the plan, including Rangelands, Forage, and Grazing, Riparian Areas, Seeps, Springs, Wetlands, and Riparian Management Zones, and Watersheds and Watershed Resources components, address these concerns.

As it relates to the removal of references to "sustainable" livestock grazing, management, and operations, I find that the word sustainable is in alignment with the intent of the planning rule at 36 CFR 219.8. Also see the *Sustainable Grazing* section of this document.

Instructions

None.

Consideration of Best Available Scientific Information for Management of Livestock Grazing

Objection Summary

Sierra Club et al. contend that the forest did not use best available scientific information regarding the impacts of livestock grazing and management practices. They claim that references provided in the Western Watersheds Project 2018 comments and 2020 Citizen's draft EIS comments were not sufficiently incorporated into the analysis.

Objectors' Proposed Remedy

Revise the ROD, final EIS, and plan to incorporate the best available scientific information and other information provided by the public, including an analysis of the "synergistic effects of livestock grazing forest wide."

Assessment

The final EIS discloses that public comments and best available scientific information were used to develop and refine issues and alternatives. This process is acknowledged in the draft ROD, consistent with direction at 36 CFR 219.3.

Numerous literature citations to support conclusions about existing conditions of rangeland vegetation as influenced by previous and current livestock grazing practices are referenced in the final EIS.

The final EIS lacks an explanation for why the referenced literature is best available scientific information, compared to the conclusions from other literature sources that were submitted by reviewers during comment periods. Notably, best available scientific information may not be limited to scientific research and literature citations, as inferred by the objector, but may also include local knowledge and local monitoring results (FSH 1909.12, zero code, section 07.13). The final EIS also does not reference forest-level monitoring, which could be used as best available scientific information that may support final EIS effects conclusions.

Conclusion

I find the forest disclosed how best available scientific information was used to inform the planning process, consistent with 36 CFR 219.3 and FSH 1909.12, zero code, section 07. The forest also disclosed literature citations supporting conclusions about the existing condition of rangelands and influences of previous and current livestock grazing practices.

However, the final EIS does not clearly identify what information was determined to be the best available scientific information; consequently, there is the need to explain the basis for the determination by including an explanation on how the information was applied to the issues considered, as required by 36 CFR 219.3. The record lacks rationale on why the responsible official considered literature referenced in the final EIS as best available scientific information, in contrast to literature cited

by objectors. Lastly, the final EIS does not reference forest-level monitoring, which would strengthen their best use of available scientific information.

Instructions

- Document the best available scientific information used in grazing management on the forest, including design features and monitoring items, where impacts to resources might occur.
- Complete a literature review of the objector's citations.
- Incorporate existing monitoring (including Reading the Range results) as best available scientific information.

Range Management and Climate Change

Objection Summary

Jeffrey Burgess asserts that the plan inadequately addresses livestock management in the face of ongoing climate change, including prolonged drought and increasing wildfire. Objector ultimately questions whether the plan's strategy for managing livestock in the face of drought and on lands that have been burned by wildlife is "more focused on protecting the economic interests of individual grazing permittees, or the protection of publicly owned natural resources in the interest of all Americans."

- The objector highlights GRZ-G-03, but states that the plan fails to identify the forest's primary objective for managing livestock grazing during drought. The objector asks:
    - *Would livestock be given access to riparian areas from which they would otherwise be excluded?*
    - *Would livestock be allowed to exceed the forest's "conservative" allowable forage utilization levels?*
    - *Would livestock be authorized to use vacant allotments, or other areas currently closed to grazing?*
    - *Would grazing permittees be allowed to dewater natural springs to provide water for livestock?*
    - *How long would drought-stricken lands be allowed to recover before being grazed again?*
- The objector highlights three recent large-scale fires (Woodbury Fire in 2019, Brush Fire in 2020, and Telegraph Fire in 2021) and states that the forest's primary objective inappropriately has been to maintain ranching operations in the aftermath.
    - Objector recounts a scenario on the Sunflower grazing allotment after the Brush Fire where the 2021 annual operating instructions authorized "temporary" grazing in unburned portions, including areas that hadn't been grazed for many years; objector states these areas have important perennial riparian areas that provide endangered species habitat. The 2022 instructions included a large increase in authorized cattle numbers and resumed grazing on the burned areas, despite continuing drought.
    - Objector recounts another scenario on the Coolidge Park and Lyons Fork allotments, which were burned in the Telegraph Fire. The annual operation instructions on the Coolidge Park allotment only reduced authorized adult cattle to 60 in 2022, from just 70 prior to the fire. Similarly, the Lyons Forks allotment was authorized for 88 cattle in

2021, only just down from 99 prior to the fire. The allotments were continuing to experience drought.

- Objector recounts another scenario: a letter sent to the Coolidge Parker allotment's permittee regarding the 2021 instructions that stated: "As the Telegraph Fire burn area recovers, we will continue to manage each allotment individually to reintroduce cattle at the earliest possible date..."

Objector's Proposed Remedies

- Include more details about the primary objective of the forest's drought management strategy regarding livestock grazing.
- Include more details about the primary objective of the forest's post-wildfire management strategy regarding livestock grazing.

Assessment

The plan component referenced by the objector includes:

> *GRZ-G-03: Drought preparedness should be emphasized in allotment management plans and may include flexible stocking rates/livestock classes, flexible rotation schedules, and other strategies for dealing with climate variability.*

The planning rule directs the responsible official to consider climate change as a system stressor and driver when developing plan components to provide for multiple uses, such as livestock grazing (36 CFR 219.10). The final EIS considered impacts of climate change stressors on forage production and grazing (final EIS, volume 1, p. 145). The land management plan includes direction that would allow for climate change and drought preparedness during the allotment planning process. The forest demonstrated drought and wildfire stressors induced removal of livestock (forest plan assessment, volume II, p. 71).

The objector expressed specific concern with GRZ-G-03 and how livestock would be managed during drought. Consistent with FSH 1909.12, chapter 20, section 23.23(d), the forest deferred utilization limits to the more appropriate level of allotment management plan planning. Evaluation of livestock use in and around riparian areas on an allotment specific basis is provided through CFRs prescribing development and implementation of allotment management plans. Further, the forest developed the plan holistically where "integrated resource management recognizes the interdependency of ecological, social, cultural, and economic resources and how management of one resource can influence the management or condition of other resources" (plan, p. 17). Additionally, the plan states that planners and the decision maker should consider the entire plan when managing for desired conditions, instead of just one resource's plan components (p. 17).

Federal Land Policy and Management Act of 1976 (FLPMA) section 402 is the basis for current regulations found at 36 CFR 222. Term grazing permit modification includes the seasons of use, numbers, kind, and class of livestock allowed or the allotment to be used under the permit, because of resource condition, or permittee request (36 CFR 222.4(a)(8)). Permits modifications would follow the direction provided in the Southwestern Region's Supplement to FSH 2209.13, chapter 10, which includes general administration drought guidelines and considerations for re-stocking and management of grazing allotments post-disturbance.

Conclusion

I find the forest adequately addressed impacts of climate change on rangelands consistent with climate change requirements of 36 CFR Part 219 through the development of plan components related to stressors on rangelands and other natural resources (36 CFR 219.8(a)(1)(iv), 36 CFR 219.10(a)(8)). The objector's remedy included adding more details about the primary objective of the forest's drought management strategy regarding livestock grazing and the forest's post-wildfire management strategy regarding livestock grazing. The plan and general administration of grazing permit provide sufficient direction for the forest to manage for forest drought, wildfire, and other disturbances.

Instructions

None.

Livestock Monitoring

Objection Summary

Sierra Club et al. states that the forest cannot rely upon monitoring to justify forest-wide livestock grazing authorizations. The objectors cite the final EIS (volume 2, p. 69) and states:

- *[T]he monitoring program includes just 57 of the 106 allotments and those allotments cover just 1.48 million acres of the more than 2.8 million acres of land managed by the forest.*
- *The forest "conducted a "coarse review" of just 265 monitoring reports collected since 2001 (just a portion of the reports covering less than half of the allotments on the forest) and found that 'most' monitoring sites were stable or trending upward 'for the time monitored.*

Objectors' Proposed Remedy

Withdraw the draft ROD and conduct a "reality-based" analysis of the impacts of livestock grazing.

Assessment

Managing rangelands for commercial grazing is mandated by regulation. These regulations include:

- *222.2(a): Allotments will be designated on the National Forest System and on other lands under Forest Service control where the land is available for grazing.*
- *222.2(c): Forage producing National Forest System lands will be managed for livestock grazing and the allotment management plans will be prepared consistent with land management plans.*

Volume II of the forest plan assessment displays the range allotment (p. 69, figure 27) and states that every allotment has an allotment management plan (p. 75).

36 CFR 219.12 sets out plan monitoring questions and associated indicators; this monitoring is plan-level and therefore does not apply to projects or site-specific activities. The land management plan (p. 163) includes monitoring topic questions, plan components, and measurement intervals based on desired conditions and objectives, in compliance with 36 CFR 219.12.

Conclusion

I find the forest is managing rangelands for commercial grazing, as required by applicable law and consistent with Forest Service regulations at 36 CFR Part 222. I also find that forest has met requirements of the planning rule (CFR 219.12) regarding monitoring.

Instructions

None.

MINING AND MINERALS

Minerals Regulations

Objection Summary

Arizona Mining Association, Freeport-McMoRan, and Pinto Valley Mining Company allege that the final plan is inconsistent with or repetitive of existing laws and regulations. This includes specific concerns related to added requirements for mining and minerals that are more restrictive than what is required by law, regulation, or policy. They point to specific mining and minerals plan components including MMAM-DC-01, MMAM-DC-02, MMAM-S-02 and MMAM-S-04, MMAM-G-03, MMAM-G-04, MMAM-G-06. Freeport-McMoRan believes this plan direction is in direct conflict with the Multiple-Use Sustained-Yield Act and objector Pinto Valley Mining Corporation highlights that it is particularly important that standards reflect applicable regulatory requirements.

Objectors' Proposed Remedies

Arizona Mining Association

Make the following changes to the plan. Suggested additions are italicized and suggested sections to remove are shown with strike throughs in the text.

- MMAM-DC-01: Mining and Mineral Activities comply with law, regulation, and policy in the development of minerals. Minimize adverse environmental impacts *where feasible* to surface ~~and groundwater~~ resources *which includes air quality, water quality, fisheries* ~~watershed and forest ecosystem health~~, ~~wildlife~~ and wildlife habitat, scenic *values* ~~character~~, *roads, solid wastes and reclamation.* ~~other desired conditions applicable to the area~~.
- MMAM-DC-02: Reclaimed mining and mineral sites provides for public safety and the ~~protection~~ *prevention or control* ~~*of*~~ *damage to* ~~of~~ forest *surfaces* resources. ~~They possess a resilient forest ecosystem suitable to permanent post mining landform.~~
- MMAM-S-02: Required reclamation activities, *where practicable,* shall be designed to *prevent or control onsite or off-site damage to the environment and forest surface resource.* ~~establish resilient post mining ecosystems consistent with the pre-disturbance ecological response unit or to an ecological response unit identified as achievable to the post-mining landscape condition~~.
- Delete MMAM-G-04, MMAM-MA-01, and MMAM-MA-06.

Freeport-McMoRan

- Modify MMAM-G-06 to define "abandoned" as meaning facilities that are closed without plans of reactivation.
- Remove the term "resiliency" and the newly added definition of the term on page 10 in the Ecological Sustainability section.

- Make edits consistent with Arizona Mining Association's suggestions for MMAM-DC-01, MMAM-DC-02, and MMAM-S-02.

Assessment

The plan components referenced by the objector include:

- *MMAM-DC-01: Mining and mineral activities comply with law, regulation, and policy in the development of mineral resources. Minimize adverse environmental impacts to surface and groundwater resources, watershed and forest ecosystem health, wildlife and wildlife habitat, scenic character, and other desired conditions applicable to the area.*
- *MMAM-DC-02: Reclaimed mining and mineral sites provide for public safety and the protection of forest resources. They possess a resilient forest ecosystem suitable to permanent post mining landform.*
- *MMAM-S-02: Required reclamation activities shall be designed to establish resilient post-mining ecosystems consistent with the pre-disturbance ecological response unit or to an ecological response unit identified as achievable to the post-mining landscape condition.*
- *MMAM-S-04: A Notice of Intent shall be submitted to the District Ranger from any person proposing to conduct geophysical investigations (e.g., induced polarization, gravity surveys, magnetic surveys, seismic investigations).*
- *MMAM-G-03: Placer mining should avoid damaging riparian vegetation, degrading water quality, and negatively impacting channel stability.*
- *MMAM-G-04: Surface reclamation and revegetation plans for smaller scale mineral activities (e.g., drilling programs or smaller scale open pits), should plan for a natural species succession appropriate to the reclaimed landform and vegetative community for the identified Ecological Response Unit, to include identifying appropriate species to use in revegetation of disturbed areas.*
- *MMAM-G-06: Abandoned mine features (e.g., adits, shafts, and stopes) should be closed when a feature poses a danger to the public. If the feature is determined to contain wildlife habitat (e.g., maternity roosts or hibernacula for bats) or contain cultural resources, gating should be considered. Installed gates should conform to bat-friendly standards and be designed in such a way to allow for the safe passage of wildlife.*

Locatable mineral projects and activities will continue to be administered in accordance with the General Mining Act of 1872 (30 USC 22-42), as well as 36 CFR Part 228, Subpart A. The Forest Service has both the authority and responsibility to reasonably regulate the use of the National Forests for mining and minerals purposes, even where such uses are associated with valid existing rights.

Plan components are defined in FSH 1909.12, chapter 20, section 22.1 as guides for future project and activity decision-making in all resources. They are subject to statuary or valid existing rights. Plan components are not commitments to final decisions approving projects and they are guides for the agency, not the public (FSH 1909.12, chapter 20, section 22.1(2)(D)). Desired conditions describe the specific social, economic, and/or ecological characteristics that are desired for the plan area or a part of the plan area (final EIS, volume 3, p. 121, comment 2816-54; plan, p. 22). These are described in terms

specific enough to allow for progress toward their achievement, and all project-level management activities should be aimed at the achievement of the desired conditions for those resources in the area where the project is located (36 CFR 219.7(e)(1)(i)). Desired conditions can be thought of as vision statements that help define a collective vision for the forest in the future. Plan components do not need to reiterate existing law, regulation, or policy, although some are repeated for emphasis. Not every project will move every resource towards their desired conditions, but all project-level management activities should be aimed at the achievement of the desired conditions for those resources in the area where the project is located.

The Arizona Mining Association specifically references that desired conditions are inconsistent with 36 CFR 228.8 "requirements for environmental protection." Land management plans provide desired conditions at the forest level, while the regulations at 36 CFR Part 228 provide procedures and requirements for site-specific project proposals. Thus, they have different purposes. The plan language that the objector cites does not conflict with the regulations at 36 CFR Part 228. 36 CFR 228.8 states, "All operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources, including the following requirements..." This regulation provides a non-exhaustive list of resources to be considered, with the minimum requirements for each. The regulation does not state that no additional requirements may apply depending on site-specific conditions and in accordance with the National Environmental Policy Act, the Endangered Species Act, and other applicable laws.

As it relates to the objection points that Mining, Minerals, and Abandoned Mines standards and guidelines conflict with or are covered in other laws and regulations, the forest stated in the response to comments (final EIS, volume 3, pp. 147-148, comment 2653-5):

> *Per Revised Plan (chapter 1, Forest Plan Framework and Organization, Plan Components section), guidelines describe constraints on project and activity decision-making that allow for departure from its terms, so long as the intent of the guideline is met. In other words, guidelines are mandatory with some flexibility on how they are implemented in meeting the intent of the existing guideline. Avoiding damage to riparian vegetation, degrading water quality, and negatively impacting channel stability is not inconsistent with regulations, for example, proposed mining activities, which can reasonably be expected to result in any discharges into waters of the United States are subject to compliance with Clean Water Act sections 401, 402, and/or 404 as applicable.*

In response to Freeport-McMoRan's objection to MMAM-G-03, in accordance with 36 CFR 228.4(c) and 36 CFR 228.8(g), an operator must submit their plan of operation to the forest. Forest personnel will review plans of operations submitted by locatable mineral operators. MMAM-G-03 provide goals and intent to the forest to negotiate changes in the proposed operations in order to avoid unnecessary surface resource damage but without undue interference with the proposed operation (FSM 2800, chapter 2810, section 2817.23), but it is clear there is allowance for departure from its terms as long the intent of the guideline is met.

As it relates to the objection on MMAM-G-04, the forest stated (final EIS, volume 3, p. 122, comment 2816-61) that:

Natural species succession means the process of change in species structure of an ecological community over time and is described in Vegetation and Ecological Response Units, in Chapter 2 of the Plan. Regulatory requirements for reclamation are found in 36 CFR 228.8 (g) and include: Reshaping and revegetation of disturbed areas, where reasonably practicable; among other requirements. In response to this comment for added clarification, MMAM-G-04 has been written to state "Surface reclamation and revegetation plans for smaller scale mineral activities, such as drilling programs or smaller scale open pits, should plan for a natural species succession appropriate to the reclaimed landform and vegetative community for the identified Ecological Response Unit, to include identifying appropriate species to use in revegetation of disturbed areas.

In accordance with 36 CFR 228.4(c) and 36 CFR 228.8(g), the operator must describe their plans for reclamation throughout the operation. Forest personnel will review plans of operations submitted by locatable mineral operators that includes the proposed reclamation plan for the project. MMAM-G-04 was written to guide the agency on reclamation intent per the plan but provides for departure from its terms as long the intent of the guideline is met (36 CFR 219.7(e)(1)(iv)).

The objectors have issue with MMAM-S-02 because they allege it is contrary to existing locatable minerals regulations. In the response to comments regarding this standard, the forest stated (final EIS, volume 3, p. 125, comment 2925-00):

This standard is meant to be used to identify an ecological response unit (ERU) (detailed information about ecological response units can be found in the environmental impact statement, chapter 3, in the section on Vegetation, Ecological Response Units, Fire, and Fuels) that is achievable for the post mining landscape condition. We recognize that mining can make permanent changes to the landscape and the original ecological response unit may not be achievable. There is no intent for the plan component to require restoration. This standard gives us a rule that recognizes that for mining projects, the reclamation standard does not have to meet previous disturbance level. It is not inconsistent with existing regulations, and it allows for the deviation from original ecological response unit to a different ecological response unit that is achievable with the post mining landform.

In accordance with 36 CFR 228.4(c) and 36 CFR 228.8(g), the operator must submit descriptions of their plans for reclamation throughout the operation. Forest personnel will review plans of operations submitted by locatable mineral operators that includes the proposed reclamation plan for the project. MMAM-S-02 was written as a rule to Forest Service personnel on reclamation intent per the land management plan but it is clear there is allowance for the mining operations that make permanent changes to the landscape. Further response related to this standard is in the *Minerals Reclamation* section.

Lastly, Freeport-McMoRan takes issue with MMAM-G-06, alleging that “abandoned” should be defined as “facilities that are closed without reactivation.” The plan defines abandoned mines as “the remains of former mining operations,” and that “…abandoned applies when there are no entities or individuals left operating the mining activity or who have financial ties to the mine" (p. 57). Generally, the Forest Service references the Bureau of Land Management definition of abandoned mines as:

An abandoned hard rock mine on, or affecting public lands administered by the BLM, at which exploration, development, mining, reclamation, maintenance, and inspection of facilities and equipment, and other operations ceased, and with no evidence demonstrating that the miner intends to resume mining...

This is consistent to the forest's general definition.

Discussion on MMAM-S-04 is in the *Minerals Geophysical Investigations* section.

Conclusion

I find that MMAM-DC-01, MMAM-DC-02, MMAM-S-02, MMAM-G-03, MMAM-G-04, and MMAM-G-06 were written within the guidance described in FSH 1909.12, chapter 20, section 22.1, and will not unreasonably prohibit or hinder the operator's right to prospect, explore, and mine for locatable minerals. The plan components are consistent with applicable law, regulation, and policy.

Instructions

None.

Minerals Management Area

Objection Summary

Arizona Mining Association and Freeport-McMoRan request that the forest include a minerals management area in their plan.

Objectors' Proposed Remedy

Revise the plan to adopt a Minerals Management Area to ensure economic and social sustainability plan content is included as required by 36 CFR 219.10.

Assessment

The final EIS includes explanation of an alternative that considered a mineral exploration management area and why it was dismissed (final EIS, volume 1, pp. 247-249). The primary rationale explained that this management area was "…redundant with proposed management forest-wide within the developed alternatives…Any programmatic level direction that would be included in a Mineral Exploration Management Area is redundant with direction already described in the alternatives," (final EIS, volume 1, p. 60). The plan offers a set of standards, guidelines, objectives, and management approaches relative to minerals pursuant to 36 CFR 219.10 and FSH 1901.12. Specific to 36 CFR 219.10, the draft ROD (pp. 4-5) identifies minerals as a component of the management plan. The plan does not need to include or adopt a Minerals Management Area in order to ensure economic and social sustainability criteria have been met (36 CFR 219.10(b)).

The plan and planning record documentation is consistent in articulating the agency's role regarding mineral management on reserved public domain lands. As the Forest Service does not manage the federal mineral estate, the agency does not have broad disposal discretion of locatable minerals (General Mining Act of 1872 and 36 CFR 228.1). The agency must respond to a proposal for mineral exploration on a case-by-case basis and conduct the appropriate level of environmental analysis to

determine effects to surface resource and what terms and conditions to apply to the proposal for environmental protection (FSM 2800, chapter 2810, section 2817.2, and 36 CFR 228.4). The forest also expressed this in the response to comments (final EIS, volume 3, p. 114, comment 2970-785).

Conclusion

I find the forest has met the requirements of NEPA at 36 CFR 220.4(c)(3) in evaluating minerals through a range of alternatives. The forest also followed the planning rule at 36 CFR 219.10 and 36 CFR 219.7(c), and FSH 1901.12 in developing the necessary standards and guidelines relative to minerals management on the forest.

Instructions

None.

Effects on Minerals Activities

Objection Summary

Pinto Valley Mining Corporation, Freeport-McMoRan, and Arizona Mining Association contend that the plan exceeds mining related requirements and authorities of the forest and that plan components are not only excessive and unnecessary, but also conflict with other laws and regulations, such as the General Mining Act of 1872. Conversely, Sierra Club et al. allege that the forest fails to adequately address impacts to the environment from mining related activities.

Objectors' Proposed Remedies

Freeport-McMoRan

Modify or delete MMAM-DC-01, MMAM-DC-02, MMAM-DC-03, and MMAM-DC-05.

Pinto Valley Mining Corporation

Modify RD-DC-04, RD-G-01, RD-G-02, RD-G-03, RD-G-05, and RD-MA-02.

Sierra Club et al.

Modify MMAM-DC-01 to clarify that "companies engaging in mining and mineral activities are expected to not only follow the letter of mining regulations, but to go beyond in an effort to return public land to a condition the same or better than when activities commenced."

Assessment

The plan content referenced by the objector includes:

- *MMAM-DC-01: Mining and mineral activities comply with law, regulation, and policy in the development of mineral resources. Minimize adverse environmental impacts to surface and groundwater resources, watershed and forest ecosystem health, wildlife and wildlife habitat, scenic character, and other desired conditions applicable to the area.*
- *MMAM-DC-02: Reclaimed mining and mineral sites provide for public safety and the protection of forest resources. They possess a resilient forest ecosystem suitable to permanent post mining landform.*

- *MMAM-DC-03: Mineral materials on National Forest System lands are available to the public and to local, State, and Federal government agencies where reasonable protection of, or mitigation of effects on, other resources is assured, and where removal is not prohibited.*
- *MMAM-DC-05: Abandoned mines disturbed by past mineral exploration and mine development have been returned to stable conditions and do not pose health, safety, or environmental hazards.*
- *RD-DC-04: National Forest System roads have minimal adverse environmental impacts to soil, riparian areas, watercourses, native vegetation, and at-risk species.*
- *RD-G-01: New roads should not be constructed in areas designated as primitive in the recreation opportunity spectrum (ROS), or current protocol.*
- *RD-G-02: Construction of temporary roads in areas designated as semiprimitive nonmotorized in the recreation opportunity spectrum (ROS) should be avoided unless required by a valid permitted activity or management activity. If authorized, roads should be constructed and maintained at the lowest maintenance level needed for the intended use, then rehabilitated.*
- *RD-G-03: Decommissioned roads should be returned to their natural condition.*
- *RD-G-05: New or reconstructed roads should be located outside of the riparian management zone, or other important water resources (e.g., meadows, wetlands, seeps, and springs), in order to prevent resource damage. If road construction in riparian areas is unavoidable, it should be designed and implemented to minimize effects to natural waterflow, aquatic species, channel morphology, water quality, and native riparian vegetation. The number of stream crossings should be minimized to reduce negative impacts to natural resources.*
- *RD-MA-02: Prioritize decommissioning of roads or user created routes that impact flow regimes, are redundant routes, cause mass movement of soils and sediment, are built within the riparian management zone, or have substantial negative impacts to at-risk species.*
- *RWMA-S-04: Sales or extraction of mineral materials[83] shall not be permitted in recommended wilderness areas.*

  [83]Mineral materials/salable materials/common variety minerals, are synonymous terms for the same class of minerals that can be sold under a mineral material contract and are common. These minerals are relatively low value per volume, for example: sand, gravel, cinders, common building stone, and flagstone.
- *RNBAMA-S-01: Sales or extraction of mineral materials shall not be authorized in designated or recommended research natural areas and botanical areas.*

Plan components are defined in the FSH 1909.12 chapter 20, section 22.1 as guides for future project and activity decision-making. They are subject to statuary or valid existing rights. Plan components are guides for the agency, not the public, and are not commitments to final decisions in approving projects. (FSH 1909.12, chapter 20, section 22.1 (2)(d)). All locatable mineral projects and activities will continue to be administered in accordance with the General Mining Act of 1872 (30 USC 22-42), as well as 36 CFR Part 228.

The Arizona Mining Association and Freeport-McMoRan expressed concerns related to components that were added or changed between draft and final. The forest described their process to update plan components in the final EIS (volume 1, pp. 16-17 and 20):

> *Plan components (objectives, standards, and guidelines) and plan content (distinctive roles and contributions, management approaches, and descriptions) have been updated based on comments received, updates in best available scientific information, and internal review. Most of*

these updates are to clarify intent, update language, or add missing information without changing the purpose or analysis.

Planning record 2494 also provides rationale for these changes. The additions of the plan components were not expected to substantially change the management direction originally provided in the draft plan (40 CFR 1502.9(d)(4)).

Freeport-McMoRan took issue with the broad nature of MMAM-DC-01, MMAM-DC-02, MMAM-DC-03, and MMAM-DC-05. As defined in FSH 1909.12, chapter 20, section 22.1, a desired condition is a description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined, but do not include completion dates.

These desired conditions were purposely written broadly to be able to apply to the entire plan area, as defined in FSH 1909.12, chapter 20, section 22.1, and used terms that are generally understood throughout the agency. The forest describes its intent for desired conditions in the response to comments (final EIS, volume 3, p. 121, comment 2816-54 and 2816-57) to provide the goals for forest to work towards. The language used in these desired conditions is common language used throughout the agency and are goals the agency already strives towards. While all projects need to be evaluated for plan consistency, the plan recognizes that not every project will move every resource towards desired conditions (p. 16). There may be instances in which the unit allow deviation for projects that have, for example, valid existing rights (locatable mineral projects) without requiring a project-specific plan amendment (36 CFR 219.15).

Freeport-McMoRan did not agree with restrictions on the "sale or extraction of mineral materials" in RWMA-S-04 and RNBAMA-S-01. RWMA-S-04 and RNBAMA-S-01 limit where common variety minerals may be obtained in recommended wilderness areas, botanical areas, and research natural areas. As the forest explained in the response to comments (final EIS, volume 3, p. 122, comment 2816-55), the forest aims to balance conflicting resource needs to provide multi-use management. FSM 2800, chapter 2850, section 2850.3 describes the discretion of the responsible official, stating that proponents may, "Dispose of mineral materials only when the authorized officer determines that the disposal is not detrimental to the public interest and that the benefits to be derived from a proposed disposal exceed the total cost and impacts of resource disturbance." Furthermore, Subpart C of 36 CFR Part 228 states the Forest Service has discretion to deny disposal of salable minerals, such as sand and gravel and common variety building stone.

Pinto Valley Mining Corporation expressed issue with the following management approaches, guidelines, and desired conditions due their alleged lack of specificity to locatable mineral projects for RD-DC-04, RD-G-01, RD-G-02, RD-G-03, RD-G-05, and RD-MA-02. These were purposely written to be able to apply to the entire plan area as defined in FSH 1909.12, chapter 20, section 22.1, whether there is mineral potential or not. Guidelines are specifically written for flexibility, defining compliance so as long as the purpose of the guideline is met (FSH 1909.12, chapter 20, section 22.14). These plan components are goals and intention for the forest to follow when designing or reviewing projects but allow deviation for projects that have, for example, valid existing rights (locatable mineral projects) without requiring a project-specific plan amendment (36 CFR 219.15). When a locatable project is submitted to the forest, the proposal is reviewed by the authorized official; part of this review includes if

the operations is proposed, where feasible, to minimize impact to surface resources (36 CFR 228.4 and 228.8). These plan components provide goals and intent to the forest to negotiate changes in the proposed operations in order to avoid unnecessary surface resource damage, without undue interference with the proposed operation (FSM 2800, chapter 2810, section 2817.23).

Sierra Club et al. alleged that the forest did not describe its regulatory authority regarding protection or minimizing adverse impacts of the environment from locatable mineral projects. The forest responded to their concerns stating that the regulatory authority was described in the final EIS (volume 1, p. 247) and that the Secretary of Agriculture has authorized regulations that ensure surface resource protection (final EIS, volume 3, p. 114, comment 2970-770). The objectors' comments on this subject were general and did not provide examples of how they wanted the forest to further describe its regulatory authority. Project proposals are also subject to the National Environmental Policy Act, the Endangered Specis Act, the National Historic Preservation Act, and other federal procedural and substantive laws in addition to the forest plan.

This assessment excludes discussion on MMAM-S-04, which has been addressed in the *Minerals Geophysical Investigations* section of this document.

Conclusion

I find the plan components identified in this objection were written considering the guidance described in FSH 1909.12, chapter 20, section 22.1 and will not unreasonably prohibit or hinder with the operator's right to prospect, explore, and mine for locatable minerals. I find that the addition of plan components was done so in accordance with the planning rule (36 CFR Part 219) and agree that they are not expected to substantially change the management direction originally provided in the draft plan (40 CFR 1502.9(d)(4)).

I find that Sierra Club et al. did not provide examples of how they wanted the forest to further describe its regulatory authority in the final EIS or final plan. The forest responded adequately with their best interpretation of what Sierra Club et al. recommended.

Instructions

None.

Cumulative Effects Analysis

Objection Summary

Sierra Club et al. allege that the forest violated NEPA by not completing a cumulative effects analysis on historic and current mining. They are concerned that the current standards and guidelines have been "watered down or outright removed."

Objectors' Proposed Remedy

Adopt the suggested standards and guidelines and management approaches in the mining and minerals section of the plan, as provided in 2020 Citizen's draft EIS comments (pp. 223-224).

Assessment

As stated in the final EIS, the cumulative effects analysis does not attempt to quantify the effects of past actions by adding up all prior actions on an action-by-action basis. In order to understand the contribution of past actions to the cumulative effects of the proposed action and alternatives, this analysis relies on current conditions (as detailed in the description of alternative A) as a proxy for the impacts of past and present actions (final EIS, volume 1, p. 252). This is because existing conditions reflect the aggregate impact of all prior actions and natural events. With respect to past actions, during the scoping process and subsequent preparation of the analysis, the agency must determine what information regarding past actions is useful and relevant to the required analysis of cumulative effects (36 CFR 220.4(f)).

This analysis focuses on the cumulative impact of those reasonably foreseeable actions that are relevant in assessing the impacts of revising the land management plan. The final EIS (volume 1, p. 61) also acknowledges that:

> *Because a land management plan (forest plan) does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions), there can be no direct effects The land management plan sets the stage for what future management actions are needed to achieve desired outcomes (e.g., desired conditions and objectives), and provides the sideboards (e.g., suitability, standards, and guidelines) under which future activities may occur to manage risks to ecological, social, and economic environments. The plan also identifies potential management approaches that may be used to help achieve desired conditions. To plan and proceed with a site-specific project, project-level planning, environmental analysis, and decisions must occur and decisions must occur guided by the direction in the plan. Before any ground-disturbing actions take place, they must be authorized in a subsequent site-specific environmental analysis, and decisions must occur, and decisions must occur guided by the direction in the forest plan.*

An assessment of current and future mineral activity was completed in volume 2 of the final assessment, which identifies the mineral resources that have historically been developed on the forest, and the potential availability of mineral resources for current and future exploration and development.

The forest responded to comments from the objector on this same point. The response to comment (final EIS, volume 3, comment 2970-769, p. 109) explains that the relevance of the applicable locatable mineral regulations at 36 CFR Part 228, Subpart A that standardize the approach to the Forest Service review and evaluation of each site-specific minerals project as well as the limitations in Forest Service authority to foreclose lawful mining operations on National Forest System lands.

Conclusion

I find the final EIS and the planning record support the evidence of a cumulative effects analysis consistent with NEPA (36 CFR 220.4(f)), and provides rationale based on law, regulation, and policy as to why the forest did not alter the standards and guidelines as recommended by the objector.

Instructions

None.

Plan's Effects on Mining Related Economics

Objection Summary

Arizona Mining Association, Freeport-McMoRan, and Pinto Valley Mining Corporation are concerned with the plan's lack of emphasis on components that acknowledge the rights of a mining operator, as well as with plan's and EIS's lack of emphasis on acknowledging the economic contributions from the mining industry.

Arizona Mining Association also expressed concerns with roads plan components they believe were designed to regulate or limit locatable minerals and mineral material development.

Freeport-McMoRan is specifically concerned with key ecosystem services because of the reference to a landscape outside of the plan area.

Objectors' Proposed Remedies

Arizona Mining Association

- Revise the plan to include recognition of mining as an important contributor to economic sustainability; and
- Develop at least one desired condition, objective, standard or guideline that promotes exploration and/or development; and
- Exclude roads constructed for exploration and mining from RD-G-01, RD-G-05, RD-G-08, and RD-G-11.

Freeport-McMoRan

- Remove the new sentence "These key ecosystem services are important in the broader landscape outside of the forest plan" from page 7 of the plan.

Assessment

The plan components referenced by the objector include:

- *RD-G-01: New roads should not be constructed in areas designated as primitive in the recreation opportunity spectrum (ROS), or current protocol.*
- *RD-G-05: New or reconstructed roads should be located outside of the riparian management zone, or other important water resources (e.g., meadows, wetlands, seeps, and springs), in order to prevent resource damage. If road construction in riparian areas is unavoidable, it should be designed and implemented to minimize effects to natural waterflow, aquatic species, channel morphology, water quality, and native riparian vegetation. The number of stream crossings should be minimized to reduce negative impacts to natural resources.*
- *RD-G-08: Roads should be closed, or impacts mitigated if geologic hazards (e.g., landslides, rock falls, or flooding) or hazard trees occur.*
- *RD-G-11: Construction of new and relocated roads should avoid areas with high mass wasting[47] potential, (e.g., high landslide prone areas).*

  [47] Bankfull is the incipient elevation on the bank where flooding begins. In many stream systems the bankfull stage is associated with flow that just fills the channel to the top of its banks and at a point where the water begins to overflow onto a floodplain (Zeedyk, B. and Clothier, V. 2009).

The objectors take issue with the lack of emphasis that the plan components have in acknowledging the rights of a mining operator. The forest responded to this in the response to comments (final EIS, volume 3, p. 257, comment 2925-00):

> *Most of the guidance for mining is governed by law, regulation, and policy, which does not need to be repeated within the forest plan. Future projects and activities, of any kind, must be consistent with the forest plan and various laws, agency policy, including direction to manage exploration or mining operations.*

Law, regulation, and policy support the rights of the mining operator and is recognized in the planning record (land management plan, p. 57).

The objectors also expressed issue with the lack of emphasis the plan and final EIS have in acknowledging the economic contributions the mining industry provides. The final EIS (volume 1, pp. 193-194) describes in detail that job related to minerals have the highest per job income. In the Mining, Minerals, and Abandoned Mines section of the final EIS, the forest also expresses the importance of minerals: “The Forest Service recognizes minerals are fundamental to the Nation’s well-being and, as policy, encourages exploration and development of mineral resources on National Forest System lands,” (p. 247). There is not policy that describes how much emphasis the forest needs to write about a certain industry sector. Therefore, the forest reasonably described the economic contributions the mining industry provides in the region, based on available information.

All locatable mineral projects and activities will continue to be administered in accordance with the General Mining Act of 1872 (30 USC 22-42), as well as 36 CFR Part 228, Subpart A. 36 CFR 228.12 states that an operator is entitled to access in connection to operations. Case law and agency guidance has supported operator access for locatable mineral operations through decommissioned roads, inventoried roadless areas, and other special management areas. Plan components are defined in FSH 1909.12, chapter 20, section 22.1 are guides for future project and activity decision-making. They cannot interfere with statuary or valid existing rights. Plan components are not commitments to final decisions approving projects and they are guides for the agency, not the public (FSH 1909.12, chapter 20, section 22.1(2)(d)).

RD-G-01, RD-G-05, RD-G-08, and RD-G-11 were purposely written to be able to apply to the entire plan area, as defined in FSH 1909.12, chapter 20, section 22.1, whether there is mineral potential or not. Guidelines are specifically written for flexibility in defining compliance, as long as the purpose of the guideline is met (FSH 1909.12, chapter 20, section 22.14). These plan components are intentions for the forest when designing or reviewing projects but allow deviation for projects that have, for example, valid existing rights, without requiring a project-specific plan amendment (36 CFR 219.15). When a locatable project is submitted to the forest, the proposal is reviewed by the authorized official; part of this review includes if the operations is proposed, where feasible, to minimize impact to surface resources (36 CFR 228.4 and 36 CFR 228.8). These plan components provide guidance for the the forest in discussing potential changes to the proposed operations that may be needed to avoid unnecessary surface resource damage, but without undue interference with the proposed operation (FSM 2800, chapter 2810, section 2817.23).

Freeport-McMoRan took issue with the plan’s sentence on page 7 that describes ecosystem services. They explain that the verbiage "broader landscape outside of the forest plan area" is concerning and overly broad and leads to an arbitrary and capricious interpretation or application." This statement in

the plan describes how decisions made within the plan area can impact the broader landscape outside of the plan area. The objectors did not comment on this concern when the draft plan was published, did not provide more detail on why they are concerned or how it could lead to an arbitrary and capricious interpretation or application, nor did they propose a solution.

Conclusion

I find that RD-G-01, RD-G-05, RD-G-08, and RD-G-11 were written within the guidance described in FSH 1909.12, chapter 20, section 22.1 and will not unreasonably prohibit or hinder the operator's right to prospect, explore, and mine for locatable minerals. The plan acknowledges the economic contributions of the mining industry in the final EIS and reasonably describes the economic contributions the mining industry has in the region based off information available.

Instructions

None.

Minerals Geophysical Investigation

Objection Summary

Arizona Mining Association, Freeport-McMoRan, and Pinto Valley Mining Corporation object to MMAM-S-04 because the requirement of a notice of intent to a district ranger for all types of geophysical investigation (even those that do not cause significant resource disturbance) is outside of the authority of a district ranger and is not consistent with Forest Service regulations and policy.

Objectors' Proposed Remedy

Remove MMAM-S-04.

Assessment

The plan component referenced by the objector includes:

> *MMAM-S-04: A Notice of Intent shall be submitted to the District Ranger from any person proposing to conduct geophysical investigations (e.g., induced polarization, gravity surveys, magnetic surveys, seismic investigations).*

According to FSH 1909.12, chapter 20, section 22.1, plan components are to "guide and constrain Forest Service personnel; not the public," (p. 33). 36 CFR 228.4(a) states: "A notice of intent to operate is required from any person proposing to conduct operations which might cause significant disturbance of surface resources." Therefore, a notice of intent (NOI) is an operator-based proposal, not a Forest Service-based proposal.

MMAM-S-04 was added between draft and final, consistent with 40 CFR 1503.4. The forest described the rationale for adding the standard to the final plan in the response to comments as "Evaluating the likely disturbance from geophysical surveys allows for compliance with other laws, regulations, and policies," (final EIS, volume 3, p. 126, comment 2925-00).

Conclusion

I find that MMAM-S-04 guides and constrains the public, which is inconsistent with FSH 1909.12 chapter 20, section 22.1.2.

Instructions

Update MMAM-S-04 to clarify that it does not constrain the public, such as by re-wording the standard to: *The District Ranger shall confirm that any person proposing to conduct geophysical investigations (e.g., induced polarization, gravity surveys, magnetic surveys, seismic investigations) submits a Notice of Intent under 36 CFR 228.4(a).*

Mining Reclamation

Objection Summary

Freeport-McMoRan alleges that MMAM-MA-06 (formerly MMAM-G-03) is not consistent with law and regulation and that it "encourages reclamation of large-scale mine sites to convert to other productive uses" and believes it "should not be more stringent than or inconsistent with applicable regulations."

The objector is also concerned because MMAM-S-02 requires that "reclamation activities shall be designed to establish resilient post-mining ecosystems consistent with the pre-disturbance ecological response unit or to an ecological response unit identified as achievable to the post-mining landscape condition." They state that "ecological response unit" is not practicable.

Lastly, the objector points out that "resilient post-mining ecosystems" is not defined and is not a regulatory requirement.

Objector's Proposed Remedy

Delete MMAM-MA-06 and MMAM-S-02.

Assessment

The plan content referenced by the objector includes:

- *MMAM-S-02: Required reclamation activities shall be designed to establish resilient post-mining ecosystems consistent with the pre-disturbance ecological response unit or to an ecological response unit identified as achievable to the post-mining landscape condition.*
- *MMAM-MA-06: Encourage reclamation of large-scale mine sites to convert to other productive uses (e.g., renewable energy production, agricultural, or recreational types of uses) where reclamation to the original Ecological Response Unit is impracticable due to impacts of the action.*

The Forest Service has authority to establish rules and regulations for the protection of National Forest surface resources in conjunction with valid uses preserved by the Organic Act of 1897. It is consistent with regulation and policy that reclamation shall be an integral part of plans of operations that propose surface disturbance and mineral activities shall be reclaimed to a condition that is consistent with land management plans (FSM 2800, chapter 40). The General Mining Act of 1872 provides for the framework by which federal minerals are located, accessed, and developed on the public lands, but is silent

regarding the protection of the surface resources and environment from which the minerals are extracted and processed (30 USC 22 et seq.). The act does not define nor explicitly require reclamation or other surface resource protection measures. Therefore, it is consistent with the act for the forest to develop plan content to achieve desired conditions through reclamation activities.

The objector states that the term "resilient post-mining ecosystems" is not defined in the final EIS and is it required by regulation. The planning record contains references to the definition of both resilient and ecosystem (final EIS, volume 2, Glossary, pp. 265-266 and 276). As stated in the response the comments (final EIS, volume 3, p. 250, comment 2925-00), MMAM-S-02 recognizes that reclamation standards for mining projects do not have to meet a previous disturbance level. It is not inconsistent with existing regulations at 36 CFR Part 228, Subpart A and FSM 2800, chapter 2840, section 2840.3. The standard enables the forest and proponent to comply with 36 CFR Part 228 and plan components.

The objector alleges that the ecological response unit is often not practical or feasible as expressed in MMAM-MA-06. The 2017 forest plan assessment explains that the ecological response unit framework has been used in other planning efforts in the Southwestern Region of the Forest Service. Management approaches describe an approach or strategy to help achieve desired conditions (36 CFR 219.7(f)(2); FSH 1909.12, chapter 20, section 22.4). Management approaches are intended to communicate intent or provide optional content outside of standards. They are not plan direction and therefore not binding.

Conclusion

I find the final EIS and planning record support the development and application of the definitions utilized in the preparation of MMAM-S-02 and MMAM-MA-06 and are consistent with the National Forest Management Act, the planning rule, and FSH 1909.12, chapter 20.

Instructions

None.

Mining Reclamation Backlog

Objection Summary

Sierra Club et al. are concerned that MMAM-O-01, which sets an objective for the forest to reclaim ten abandoned mines over the life of the plan, is not sufficient due to the number of abandoned mines across the forest that need to be reclaimed.

Objectors' Proposed Remedy

Change objective MMAM-O-01 to: *Initiate at least one environmental review for closure of one or more abandoned or inactive mine(s) every two years.*

Assessment

The plan component referenced by the objector includes:

MMAM-O-01: Implement closures of at least ten abandoned mines over the life of the plan.

FSH 1909.12, chapter 20, section 22.12, defines an objective as a concise, measurable, and time-specific statement of a desired rate of progress toward desired conditions. Objectives should be based on

reasonably foreseeable budgets (36 CFR 219.7(e)(1)(ii)). The planning rule also states that the objective must be attainable within the fiscal capability of the unit, determined through a trend analysis of the recent (three to five years) past budget obligations for the unit (36 CFR 219.9(e)(1)(ii)).

The Forest Service's Abandoned Mine Lands program identifies mine features posing a danger to the public, which are prioritized and identified for closure or remediation. The classification as abandoned applies when there are no entities or individuals left operating the mining activity or who have financial ties to the mine (land management plan, p. 57). The significance of this classification is that for most abandoned sites there is no money from the original operators available to clean up the sites. Occasionally, a responsible party can be found to contribute funds toward cleanup, but often the major burden falls on the Forest Service to finance cleanup and remediation.

The Forest Service's Abandoned Mine Lands program prioritizes the funding for safety closures and mine land remediation annually with a budget appropriation that is shared between the Minerals and Geology and Engineering program nationally, intended to focus on the most environmentally critical. Given these limitations, a forest's ability to remedy more than one or two annually is severely limited, given the additional requirements of NEPA analysis, contracting, and actual on-the-ground remediation.

Conclusion

I find that MMAM-O-01 was written within the guidance of FSH 1909.12, chapter 20, section 22.12 and consistent 36 CFR 219.7(e)(1)(ii). The forest recognizes the limitation of funding and personnel constraints, prioritization of the multitude of resource issues, goals and priorities the Forest Service must recognize, and challenges of implementation.

Instructions

None.

LANDS AND SPECIAL USES

Lands and Special Uses Plan Components

Objection Summary

Freeport-McMoRan takes issue with multiple lands and special uses related plan components EG-G-02, LA-MA-02, SU-DC-01, SU-DC-06, SU-S-03, SU-G-01, SU-G-08, SU-MA-04. The objector requests that the fprest either delete or revert these components to the versions in the draft plan.

The following is the objector's rationale (note that specific rationale for SU-DC-01 and SU-G-08 was not provided):

- *EG-G-02: This guideline was substantially modified by replacing 'disturbance to wildlife and vegetation' with the new verbiage 'and scenic disturbances' which is overly broad and leads to an arbitrary and capricious interpretation or application.*
- *LA-MA-02: The new verbiage of 'through acquiring easements' added to this management approach is unnecessary and should be deleted. This leads the industry and other impacted groups to overly burdensome and costly approaches.*

- *SU-DC-06: "Assuming the [forest] replaced 'not present on the landscape' with 'removed and rehabilitated' in attempt to clarify this desired condition, it is still overly broad and leads to an arbitrary and capricious interpretation while not providing the direction and guidance needed to make the approach to the application of the plan content valuable in its effort.*
- *SU-S-03: This standard was significantly modified by replacing "requirements" with the new verbiage of 'operating plan which describes means of access…responsibilities and incorporates design elements to…from these activities." As such, it is unclear if this standard is meant to impact "powerline facilities that are not subject to the mandatory reliability standards established by the Electric Reliability Organization and/or sold that sold less than or equal to 1,000,000 megawatt hours of electric energy."*
- *SU-G-01: [Freeport-McMoRan] maintains its objections to this guideline on the basis that forest did not sufficiently respond to [Freeport-McMoRan's] comments, which stated that this guideline's reference to "better social, economic, and ecological benefits" is ambiguous. How would this be determined for utility corridors and communications sites? What are the factors relevant to making such evaluations? Would the applicant or [forest] make these determinations? It is also not clear that this type of evaluation is authorized by the applicable special use permit regulations.*
- *SU-MA-04: [Freeport-McMoRan] maintains its objection to this management approach, as the forest did not sufficiently respond to [Freeport-McMoRan's] comments, which stated that it is not clear what 'water dependent resources' means. Moreover, the terms and conditions that may be included in special use permits ('SUPs') are specifically set forth in the applicable regulations. The forest's implementation of this management approach must be consistent with, and cannot conflict with, the applicable regulations, or state water rights. It is not clear that this use of [special use permits] is authorized.*

Objector's Proposed Remedies

- EG-G-02: Revert this guideline to its initial language.
- LA-MA-02: The new verbiage of "through acquiring easements" added to this management approach is unnecessary and should be deleted.
- SU-DC-01: Replacing "provide" with "will adhere to regulations that advocate" makes this new and more restrictive. It leads to an arbitrary and capricious interpretation or application. The new verbiage should be deleted and "provide" reinstated.
- SU-DC-06: Revert this guideline to its initial language.
- SU-S-03: Revert this guideline to its initial language.
- SU-G-01: Delete.
- SU-G-08: Include design elements to mitigate such risks prior to authorization or not be authorized.
- SU-MA-04: Delete.

Assessment

The plan content referenced by the objector includes:

- *EG-G-02: Solar energy projects should give priority consideration to previously disturbed sites to prevent unnecessary environmental and scenic disturbances.*
- *LA-MA-02: While addressing access problems on the Forest, seek cooperation of private landowners through acquiring easements.*

- *SU-DC-01: Recreational special uses enhance the outdoor experiences of Forest visitors and provide unique opportunities and services. Authorized activities will adhere to regulations that advocate for public safety and reduce impacts to ecological and cultural resources and other Forest users (e.g., carpooling reduces impacts to air quality and crowding at busy parking lots, interpretation and instruction provides protection to sensitive cultural resources and vegetation). Special use activities support the public's need and demonstrated demands for specific recreation and commercial opportunities or services.*
- *SU-DC-06: Utility corridors and communications sites are sized to fit the intended use and obsolete or unused facilities are removed and rehabilitated.*
- *SU-S-03: Authorizations for utilities must incorporate an operating plan which describes means of access, requirements for road construction, reconstruction, and maintenance responsibilities and incorporates design elements to minimize resource damage (e.g., dust abatement, preventing the spread of invasive weeds) from these activities.*
- *SU-G-01: Utilities should utilize existing facilities, roads, sites, and corridors unless new sites can provide better social and/or ecological resource benefits.*
- *SU-G-08: Proposals for special uses (e.g., apiaries) that may negatively impact public safety, native fish, wildlife, and plant species (especially at-risk species) should include design elements to mitigate such risks prior to authorization or not be authorized.*
- *SU-MA-04: Consider using special use authorization terms and conditions as a means of protecting water dependent resources (refer to the Watersheds and Water Resources section) on the forest.*

EG-G-02

The planning rule requires a forest to provide guidelines addressing "scenic character" in a plan revision:

- 36 CFR 219.8(b): A plan revised must provide for social, economic, and ecological sustainability, including standards and guidelines to guide the plan area's contributions to social and economic sustainability that take into account "scenic character.
- 36 CFR 219.10 (a)(1) and 36 CFR 219.10 (b)(1)(1): A plan must provide for multiple uses including the consideration and inclusion of guidelines to provide for "scenic character". 36 CFR 219.19 defines "scenic character" as:

  > *A combination of the physical, biological, and cultural images that gives an area its scenic identity and contributes to its sense of place. Scenic character provides a frame of reference from which to determine scenic attractiveness and to measure scenic integrity.*

Page 17 of the final EIS discloses that updates to plan components (i.e., guidelines) from draft to final, are in part, to update language for clarification of intent.

More specifically, the determination of landscape scenic attractiveness (variety class inventory) and the public's visual expectations (sensitivity level inventory) were inventoried and assigned a visual quality objective, and the visual management system and scenery management system established a spectrum of levels or objectives to determine the acceptable level of alternation in the landscape (final EIS, volume 1, pp. 20-21). Furthermore, visual quality objectives and scenic integrity objectives are denoted and cross analyzed.

LA-MA-02

Access is defined in 36 CFR 251.111 as "the ability of landowners to have ingress and egress to their lands." Additionally, 36 CFR 251.110(c) states, "Subject to the terms and conditions contained in this part and in parts 212 and 293 of this chapter, landowners shall be authorized such access as the authorized officer deems to be adequate to secure them the reasonable use and enjoyment of their land."

Furthermore, 36 CFR 212.6(a) states that "…the Chief shall as promptly as feasible obtain needed access thereto and shall grant appropriate access across National Forest and other lands and easements administered by the Forest Service to intermingled or adjacent landowners." The rule thus clarifies that both the authorized officer, and/or the Chief shall grant access to adjacent private lands as determined to be "adequate" and/or "appropriate" for adjacent landowners.

While the updated verbiage in this management approach may add additional steps in order to acquire easements, the plan clarifies that easements are the appropriate and adequate authorization tool to use to grant access.

Furthermore, the final EIS states that "Plan Components were updated…to clarify intent, update language, or add missing information but did not change the purpose or analysis related to the desired conditions" (final EIS, volume 1, p. 17).

SU-DC-01

Volume 1 of the final EIS states that plan components were updated to clarify the intent, rather than to implement new and more restrictive terms and conditions of a special use authorization, satisfying the rule as stated in 36 CFR 251.56 "Terms and conditions" [of special use authorizations] (p. 17). 36 CFR 251.56(a)(1)(i)(D) states that each special use authorization must contain terms and conditions that will, "Require compliance with State standards for public health and safety, environmental protection, and siting, construction, operation, and maintenance if those standards are more stringent than applicable Federal Standards."

This change of the desired condition still meets the rule regarding the issuance of special use authorizations for recreational special uses, per the terms and conditions by specifically identifying public health and safety and environmental protection regulations. As a result, the terms and conditions of a special use authorization remain unchanged as well as the forest's intent of their continued implementation, satisfying federal regulations.

SU-DC-06

The language "obsolete or unused facilities are removed and rehabilitated" in SU-DC-06 that replaced "not present on the landscape" mirrors the language in 36 CFR 251.60(i) which states:

> *Upon revocation or termination of a special use authorization, the holder must remove within a reasonable time the structures and improvements and shall restore the site to a condition satisfactory to the authorized officer, unless the requirement to remove structures or improvements is otherwise waived in writing or in authorization.*

This regulation directs the authorized officer to interpret and determine what final condition is acceptable. This regulation is in the context of special uses authorizations either revoked or terminated

under 36 CFR Part 251, Subpart B, to include infrastructure authorized within utility corridors and communications sites.

Volume 1 of the final EIS discloses that updates to plan components (i.e., the verbiage change in SU-DC-06 from draft to final) are to update language based on internal review to clarify intent (p. 17). Furthermore, the final EIS (volume 4, pp. 20-21) further directs the authorized officer on evaluation criteria based on visual quality and scenic integrity objectives to determine the satisfactory condition of the rehabilitated area of an obsolete or unused facility that has been removed.

SU-S-03

36 CFR 251.56(h)(2) states:

> *Powerline facilities that are not subject to the mandatory reliability standards established by the Electric Reliability Organization and/or that sold less than or equal to 1,000,000 megawatt hours of electric energy for purposes other than resale during each of the 3 calendar years immediately preceding March 23, 2018, may be subject to an agreement, instead of an operating plan...*

36 CFR 251.51 defines an operating plan or agreement for a powerline facility as:

> *[A] plan or agreement prepared by the owner or operator of a powerline facility, approved by the authorized officer, and incorporated by reference into the corresponding special use authorization that provides for long-term, cost-effective, efficient, and timely inspection, operation, maintenance, and vegetation management of the powerline facility on [National Forest System] lands...*

The planning record does not clearly demonstrate incorporation of the rule's required verbiage for an operating plan or agreement. Adding this clarification will address the objector's question regarding how powerline facilities that are not subject to the mandatory reliability standards established by the Electric Reliability Organization and/or sold that sold less than or equal to 1,000,000 megawatt hours of electric energy are impacted.

SU-G-01

The objector requested a "sufficient" response to clarify SU-G-01, specifically regarding the language: "Better social, economic, and ecological benefits." The objector also included a list of specific questions they would like addressed; responses are provided below.

Question: *How would benefits be determined for utility corridors and communication sites?*

Answer: This would be determined for utility corridors and communications sites the same way they would be determined for other special land uses. A proposed use must meet proposal and application requirements, as described in 36 CFR 251.54. This includes, for example, that a proposed use is consistent or could be made consistent with the land management plan. Social, economic, and ecological benefits are specifically described in the definition of "Sustainability" in 36 CFR 219.19.

Question: *What are the factors relevant to making such evaluations?*

Answer: 36 CFR 219.19 lists and defines the relevant factors which are then utilized by resource specialists to determine that desired conditions are being met. These determinations are documented through the NEPA process.

Question: *Would the applicant or forest make these determinations?*

Answer: As stated in the response to comments: "…the Tonto National Forest coordinates this discussion and not the applicant," (final EIS, volume 3, p. 282, comment 2816-50).

Question: *It is not clear that this type of evaluation [unless new sites can provide better social and/or ecological resource benefits] is authorized by the applicable special use permit regulations.*

Answer: Proposed uses must meet the proposal and application requirements, as described in 36 CFR 251.54. The proposed use is consistent or can be made consistent with standards and guidelines in the applicable forest land management plan. The terms and conditions of the applicable special uses permit are contingent upon a proposal passing the above quoted permit application and proposal requirements.

SU-G-08

251.54(g)(3)(ii) states:

> *An authorized officer shall grant an application for a special use authorization for a noncommercial group use upon a determination that:*
>
> > *…(B) Authorization of the proposed activity is consistent or can be made consistent with the standards and guidelines in the applicable forest land and resource management plan required under the National Forest Management Act and 36 CFR part 219;*
> >
> > *…(F) The proposed activity will not pose a substantial danger to public safety…*

The final EIS identified several elements for plan components, including compliance with applicable laws, regulations, and policies; desired conditions described in detail in the plan; soil and water resources conservation; necessary ecological conditions to support at-risk species in the plan area; a common list of species of conservation concern; and protection of cultural resources (volume 1, pp. 16-17). These elements would be provided to a proponent at the time of the proposal.

SU-MA-04

In response to comments, the forest cites the *Watersheds and Water Resources* section of chapter 3 of the plan for a specific description of what water resources is (final EIS, volume 3, p. 282, comment 2816-51). This section of the plan provides the following clarifying information:

> *Watersheds collect precipitation that flows into streams and rivers, infiltrates into the ground and recharges aquifers, evaporates, or is transpired by vegetation within the watershed... Watershed condition is integral to all aspects of resource management and use. Good watershed management maintains the productive capacity of soils, protects water quality and quantity, sustains native species, provides state-designated beneficial water uses, and reduces threat of flood damage to Forest resources and downstream values.*

Water dependent resources are described in this section as "all aspects of resource management and use" and are identified as: soils; water quality and quantity; native species; state-designated beneficial water uses; downstream values; ground water; aquatic and riparian ecosystems; reservoirs; rivers; recreation opportunities (e.g., hunting, fishing, camping, boating); priority watersheds; groundwater discharge supports, fens, wetlands, seeps, springs, groundwater-fed streams, and lakes; perennial and

intermittent streams; cave and karst systems; reservoirs, earthen stock ponds, wildlife drinkers, and concrete or steel storage tanks or watering troughs; water for consumption; economy and quality of life of communities in and around the forest; water used by households, industry, power suppliers, and agriculture; human populations in and around rural communities, towns and cities in central Arizona-including the greater Phoenix area; and at risk species.

Additionally, 36 CFR 251.56(a) directs that special use authorizations are to be consistent with applicable law, regulation, and policy by including terms and conditions.

Conclusion

EG-G-02

I find that the planning record demonstrates compliance with the planning rule (36 CFR 219.10(a)(1), 36 CFR 219.10(b)(1)(i), and 36 CFR 219.19)) by providing a framework in which "scenic disturbances" can be analyzed and quantified, while also allowing for interpretations and applications to be effective in meeting the intent of EG-G-02.Therefore, I do not find the addition of "scenic disturbances" to the guideline will result in arbitrary and capricious interpretations and applications.

LA-MA-02

I find that the final EIS on pages 17 and 20-21 demonstrate compliance with 36 CFR 251.110 and 36 CFR 212.6. It accomplishes this by updating this plan component to clarify intent and to update the language to express that easements are considered the most appropriate and reasonable means to grant private landowners access to their lands. This may lead to additional work and expense of the private landowners, (perhaps instead of utilizing a special use permit), but this direction conforms to federal regulations.

SU-DC-01

I find that the change in verbiage of SU-DC-01 in the revised plan from "provides" to "will adhere to regulations that advocate" satisfies requirements at CFR 251.56. This clarifies both the previous and current intent of the plan and does not lead to new restrictions regarding recreational use special use authorizations.

SU-DC-06

I find that SU-DC-06 meets direction at 36 CFR 251.60(i), which grants the authorized officer the authority to determine satisfactory condition of a rehabilitated site upon the removal of a structure or improvement.

Volume 1 of the final EIS discloses that updates to plan components (i.e., the verbiage change in SU-DC-06 from draft to final) were made based on internal review to clarify intent (p. 17). Furthermore, the final EIS (volume 4, pp. 20-21) further directs the authorized officer on evaluation criteria based on visual quality and scenic integrity objectives to determine the satisfactory condition of the rehabilitated area of an obsolete or unused facility that has been removed.

SU-S-03

I find that language in SU-S-03 should be updated from "operating plan" to "operating plan or agreement", per 36 CFR 251.56(h)(2) and 36 CFR 251.51. The standard should read: "Authorizations for utilities must incorporate an operating plan or an operating agreement…"

SU-G-01

I find that SU-G-01 is supported by policy and the planning record. In regard to considering utility corridors and communication sites in project planning, planners design projects to be in compliance with forest plan direction. Factors that will be used in the evaluation are documented as required by NEPA. The terms and conditions of the applicable special uses permit are contingent upon a proposal meeting permit application and proposal requirements in 36 CFR 251.56. The process and the final decision are facilitated by the forest and signed by the authorized officer.

SU-G-08

I find that the objector's request that SU-G-08 include the design elements to "mitigate such risks prior to authorization" is not necessary because 36 CFR 251.54 already requires that special use authorizations be consistent with plan components.

SU-MA-04

I find that both the response to comments and the land management plan address the objector's request for clarity of the meaning of "water dependent resources", as well as consistency of the implementation of special use permits as a means of protecting water dependent resources This management approach is consistent with direction in 36 CFR 251.56.

Instructions

Update the language in SU-S-03 from "operating plan" to "operating plan or an operating agreement", per 36 CFR 251.56(h)(2) and 36 CFR 251.51. The standard should read:

> *Authorizations for utilities must incorporate an operating plan or an operating agreement, which describes means of access, requirements for road construction, reconstruction, and maintenance responsibilities and incorporated design elements to minimize resource damage (e.g., dust abatement, preventing the spread of invasive weeds) from these activities.*

Utility Corridor Guidelines

Objection Summary

Freeport-McMoRan is concerned with EG-G-01, EG-G-04, and EG-G-06 because they allege that they are arbitrary and capricious, burdensome, and too costly to implement. The objector is also concerned with the lack of opportunity to comment on the changes made to these guidelines between the draft and final plans.

The objector provides the following rationale:

- *EG-G-01: This guideline was substantially modified with the addition of the new verbiage 'or similar utility…along or.*
- *EG-G-06: This guideline was substantively modified by replacing 'electrical-utility lines of 33 kilovolts or less' with 'distribution lines,' and 'visual quality' with 'scenic integrity' in subparagraph (a); and with the addition of 'or presence of cultural resources' in subparagraph (b). [Freeport-McMoRan] objects to the modifications of this guideline on the basis that the new verbiage is not reasonably related to the expressed goals in the previous language and leads to an overly broad, arbitrary, capricious, burdensome, and costly interpretation or application; and*

there was no opportunity afforded previously to comment. Further, 'scenic integrity objectives,' is not defined in regulations and is subjective to interpretation.

Objector's Proposed Remedies

- Remove "or other resources" from EG-G-04.
- Return EG-G-06 to the wording in the draft plan.

Assessment

The plan components referenced by the objector include:

- *EG-G-01: New electrical distribution lines and smaller pipelines, or similar utility, should occur along or within existing road systems or other previously disturbed areas.*
- *EG-G-04: New energy facilities and transmission corridors should avoid locations in areas identified as having a demonstrated high risk to at-risk species, cultural resources, or other resources.*
- *EG-G-06: New distribution lines and telephone lines should be buried, unless one or more of the following applies:*
    a. *scenic integrity objectives of the area can be met using an overhead line.*
    b. *burial is not feasible due to geologic hazard, unfavorable geologic conditions, or presence of cultural resources.*
    c. *it would result in greater long-term site disturbance; or*
    d. *it is not technically feasible.*

40 CFR 1503.4 states that an agency preparing a final EIS shall consider substantive comments and may respond by modifying alternatives, including the proposed action; developing and evaluating alternatives not previously given serious consideration; supplementing, improving, or modifying its analyses; making factual corrections; and explaining why the comments do not warrant agency response.

The final EIS (volume 1, p. 17) states:

> *Plan components (objectives, standards, and guidelines) and plan content (distinctive roles and contributions, management approaches, and descriptions) have been updated based on comments received, updates in best available scientific information, and internal review. Most of these updates are to clarify intent, update language, or add missing information without changing the purpose or analysis. In a few instances, the analysis has been updated as a result of these changes. Detailed information about these changes can be found in the administrative record.*

Changes to a proposed action may occur between a draft and final EIS. Changes may occur due to new circumstances, new information, or in response to comments received on the draft EIS. If changes to the proposed action or new circumstances or information relevant to environmental concerns is not significant, the agency need not prepare a supplement (40 CFR 1502.9(d)(4)).

However, the record does not provide specific rationale for why the forest made changes to EG-G-01, EG-G-04, and EG-G-06.

Conclusion

While changes to the plan are allowed between draft and final, I find that specific rationale for changes to EG-G-01, EG-G-04, and EG-G-06 was not included in the record.

Instructions

Document specific rationale for changes to EG-G-01, EG-G-04, and EG-G-06 in the planning record. Documentation should include the reason for the change (e.g., new circumstances, new information, response to public comments) and should state whether the changes, new circumstances, or new information relevant to environmental concerns is or is not significant.

Watershed Productivity and Energy Demands

Objection Summary

Salt River Project alleges that the forest "must be managed to maximize the productivity of the Salt River watershed, facilitate ongoing Reclamation Project operations and maintenance and enable Salt River Project to meet water and energy supply needs and challenges through the development of innovative water and hydropower solutions." The objector states that doing so would be in line with the reason the forest was established, as well as in recognition of the contribution of the protection of the Reclamation Project to provide water to Phoenix metropolitan area.

Objector's Proposed Remedies

- Manage the forest to provide maximum productivity of the Salt River Watershed.
- Facilitate ongoing Reclamation Project operations and maintenance.
- Enable Salt River Project to meet water and energy supply needs through innovative water and hydropower development.

Assessment

Regulations and policies specifically related to this issue include:

- 36 CFR Part 251, Subpart B, which outlines special use screening procedures.
- FSM 2700, chapter 2770, section 2770.1 lists federal laws the agency the agency considers in the review of special use authorizations for hydropower projects and primary transmission lines, such as the Federal Power Act and the Wild and Scenic River Act. The manual also states that the agency shall "Consider energy potential a National Forest System resource in arriving at management decisions concerning proposed hydropower projects," (p. 6).

The plan on page 7 states:

> *Forest planning is a continuous process that includes: (1) assessment; (2) plan development, amendment, and revision; and (3) monitoring. The intent of this forest planning framework is to create an integrated approach to the management of resources and uses, incorporate the landscape-scale context for management, allow the Forest Service to adapt to changing conditions, and improve management based on monitoring and new information…The planning framework creates a structure within which land managers and partners work together to understand what is happening on the landscape. It is intended to establish a flexible plan that*

allows a national forest to adapt management to changing conditions and improve management based on new information and monitoring.

The plan continues on page 12 to state that plan components guide future projects and decision-making:

Plan components should (1) provide a strategic and practical framework for managing the forest; (2) should be applicable to the resources and issues of the forest; and (3) should reflect the forest's distinctive roles and contributions.

Project and activities will be developed with the direction found in the plan, as well as applicable laws, regulations, and policies.

Conclusion

I find that the plan documents that future projects will be consistent with all laws, regulations, and policies, which includes direction for the development of special uses in FSM 2700, chapter 2770, section 2770.1, and 36 CFR Part 251, Subpart B.

Instructions

None.

Special Use Permit Regulations

Objection Summary

Arizona Mining Association objects to the addition of SU-G-08 because they contend that it conflicts with special use permit regulations at 36 CFR Part 251, which already include terms and conditions, and which do not prioritize at risk species or require design elements.

Objector's Proposed Remedy

Delete SU-G-08.

Assessment

The plan component referenced by the objector includes:

SU-G-08: Proposals for special uses (e.g., apiaries) that may negatively impact public safety, native fish, wildlife, and plant species (especially at-risk species) should include design elements to mitigate such risks prior to authorization or not be authorized.

36 CFR Part 251, Subpart B is the principal authority for screening special use proposals, filing and processing special use applications, and preparing authorizations. 36 CFR 251.54(d)(5) states that "The authorized officer may require any other information and data necessary to determine feasibility of a project or activity proposed." The regulations do not state that a forest will not impose additional or more stringent requirements prior to approving a special use authorization.

FSM 2700, zero code, section 2702 states that the first objective of the special-uses program is to "Authorize and manage special uses of National Forest System lands in a manner which protects natural resources and public health and safety, consistent with National Forest System land and resource

management plans," (p. 10). Further, section 2703.3 directs to "Authorize the use of National Forest System lands under the proper statutory or regulatory authority with terms and conditions which protect the resource values and the interests of the Federal government," (p. 12).

FSH 2709.11, chapter 50 provides direction on supplemental clauses that may be added to special use permits. For example, section 52.4 lists the "D Clauses" that may be considered for resource improvement and protection.

Conclusion

I find the guideline is consistent with 36 CFR 251.54(d)(5), FSM 2700, and FSH 2709.11.

Instructions

None.

AIR QUALITY

Air Quality Management Approaches

Objection Summary

Freeport-McMoRan claims that AQ-MA-01 is inappropriate because the forest does not have jurisdictional authority to pursue actions against sources outside the forest. The objector claims that the forest's response to comments on this issue (final EIS, volume 3, p. 5, comments 2816-84 and 2816-85), which includes modifying AQ-MA-01, is insufficient. The objector also takes issue with the addition of AQ-MA-03, contending it will lead to an arbitrary and capricious interpretation or application.

Objector's Proposed Remedy

Remove AQ-MA-01 and AQ-MA-03 from the plan.

Assessment

The plan content referenced by the objector includes:

- *AQ-MA-01: Work with agencies, organizations, Tribes, and other entities to actively pursue actions designed to reduce the impacts of air pollutants from sources (e.g., smoke, road maintenance, and mining activities) within and outside the Forest.*
- *AQ-MA-03: Utilize best management practices to protect visibility and opacity standards on the Tonto National Forest, including Class I areas.*

The Forest Service is required to comply with the Clean Air Act in its activities and activities it permits, which includes maintaining visibility standards in Class I wilderness (40 CFR 93.150). Management approaches describe an approach or strategy to help achieve desired conditions (36 CFR 219.7(f)(2); FSH 1909.12, chapter 20, section 22.4). The forest clarified the intent of AQ-MA-01 in the response to comments and jurisdictional authority over air quality regulations (final EIS, volume 3, p. 5; comments 20-1, 2816-84, and 2816-85):

> *The intent of the management approach the commenter refers to in the Air Quality section in Chapter 2 of the land management plan, is to encourage collaboration and cooperation between*

stakeholders, adjacent landowners (federal, state, and/or private) to comply with the Clean Air Act and to reduce the impacts of pollutants from within and outside the Forest. In Arizona, actions affecting air quality, including permits, coordination of potential emission production actions (such as prescribed fire) are managed by the Arizona Department of Environmental Quality (DEQ).

AQ-MA-03 was revised in response to comments to focus on the management of national forest resources, rather than forces outside of the control of the forest (final EIS, volume 3, pp. 4-5, comment 2816-83).

Conclusion

I find that AQ-MA-01 is an appropriate inclusion in the land management plan because management approaches are simply an approach or strategy to achieve desired conditions, and they do not delineate new or existing authorities (36 CFR 219.7(f)(2); FSH 1909.12, chapter 20, section 22.4).

AQ-MA-03 is an appropriate inclusion in the land management plan; it supports the five desired conditions for air quality and provides for compliance with the Clean Air Act (40 CFR 93.150) and standards set by the State of Arizona.

Instructions

None.

WILDLIFE

Species-Specific Plan Components

Objection Summary

Freeport-McMoRan states that it is not clear if species-specific wildlife, fish, and plants plan components are required or not, and that if the forest cannot validate this requirement, then any species-specific components in the plan should be removed.

Objector's Proposed Remedy

Remove species-specific plan components, including guidelines and standards, where it cannot be determined that species-specific plan components are necessary.

Assessment

Plan components referenced in this assessment include:

- *WFP-G-01: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans.*
- *WFP-G-02: Where the Forest Service has entered into a signed conservation agreement that provides guidance on activities or actions to be carried out by the Forest, those activities or actions should be undertaken consistent with the guidance found within the conservation agreement.*

- *WFP-DC-01: Ecological conditions contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, maintain viable populations of species of conservation concern, and sustain both common and uncommon native species.*
- *WFP-G-08: Projects and activities that may negatively impact Sonoran Desert tortoises should apply mitigations from the Arizona Interagency Desert Tortoise Team's Recommended Standard Mitigation Measures (or similar current guidance) when designing projects in desert tortoise habitat.*

In the response to comments (final EIS, volume 3, pp. 346-347, comment 2816-81), the forest stated that:

> *…in our assessment of the ecological conditions necessary for at risk species, we found that a majority of threats to these species applied to groups rather than individual species (for example, loss or degradation of riparian and aquatic habitats, threats from uncharacteristic fire, rarity and endemism, recreation impacts, etc.). Thus, very few plan components in the forest plan are truly species-specific. Generally, we placed plan components in sections of the plan where they were most applicable (e.g., at-risk species considerations specific to the recreation program are found in the recreation section). Much of the plan direction benefiting at-risk species is found in the following sections of the revised plan (chapter 2): Vegetation and Ecological Response Units, Riparian Ecological Response Units, and Watersheds and Water Resources. Plan direction that applies more broadly to at-risk species can be found in the Wildlife, Fish, and Plants section of the revised plan (chapter 2).*

The planning rule at 36 CFR 219.9(b)(1) requires that the responsible official:

> *…Determine whether or not the plan components required by paragraph (a) of 219.9 provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area. If the responsible official determines that the plan components required in paragraph (a) are insufficient to provide such ecological conditions, then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area.*

The land management plan does not include any species-specific standards (p. 116). However, there are species specific guidelines such as, WFP-G-01, WFP-G-02, and WFP-G-08. WFP-G-01 addresses implementing management objectives and species protection measures from approved recovery plans.

- WFP-G-02 specifies that activities or actions should be untaken consistent with guidance found in conservation agreements.
- WFP-G-08 pertains to applying mitigations from the Arizona Interagency Desert Tortoise Team's Recommended Standard Mitigation Measures (or similar current guidance). These guidelines are consistent with direction provided in:
    - FSM 2600, chapter 2670, section 2670.44 (p. 7): *In cooperation with the [United States Fish and Wildlife Service] and States, establish recovery objectives in the absence of, or interim to, approved Recovery Plans; integrate these objectives with regional and forest plans; and*

- FSM 2670.45 (p. 8): *Ensure that legal and biological requirements for the conservation of endangered, threatened, and proposed plants and animals are met in forest land and resource management planning; ensure compliance with procedural and biological requirements for sensitive species.*

Appendix B of the final EIS describes the wildlife analysis (final EIS, volume 4, pp. 47-50). Appendix G includes a crosswalk of ecological conditions and at-risk species by providing tables "that describe threats to persistence for each at-risk species and identified plan components which provide the ecological conditions necessary to 1) maintain a viable population of each species of conservation concern in the plan area, or 2) contribute to the recovery of federally listed species" (final EIS, volume 4, pp. 432-477). These tables identify a threat to a species and relevant plan component. The effects to these species are discussed in chapter 3 of the final EIS. For example, one threat to Allen's big-eared bat was identified as recreation impacts to caves; CVK-G-02 was listed as a relevant plan component; and the effects of this were discussed on page 58 of chapter 3 (final EIS, volume 2).

The inclusion of species-specific plan guidelines in the plan is consistent with FSM 2600, chapter 2670 and 36 CFR 219.9(b)(1) to contribute towards the recovery of Endangered Species Act listed species and species of conservation concern. However, in order to make it clear that the plan components do contribute to recovery for Endangered Species Act species, both the planning rule and Endangered Species Act require that explicit determinations are made regarding at-risk species (i.e., Endangered Species Act listed species and species of conservation concern). In meeting this requirement for Endangered Species Act listed species, include a determination section for each species that makes explicit the tie between plan components, the projected changes in the environment, the stressors plan components make or manage, and the outcome for the species (36 CFR 219.9, as described in FSH 1909.12, chapter 20, section 23.13).

For species of conservation concern, provide ecological conditions necessary to maintain a viable population within the plan area. Provide determinations using the specific language in the planning rule regarding the requirements for the different at-risk species.

Conclusion

I find that the inclusion of species-specific plan guidelines is consistent with FSM 2600, chapter 2670 and 36 CFR 219.9(b)(1) to contribute towards the recovery of Endangered Species Act listed species and species of conservation concern. Determination calls for threatened and endangered species were disclosed in the biological assessmentFor species of conservation concern, the EIS should specifically state whether the plan does or does not provide the ecological conditions necessary to maintain a viable population within the plan area.

Instructions

Include a determination for species of conservation concern in the final EIS that clarifies the tie between plan components, the projected changes in the environment, the stressors plan components make or manage, and the outcome for the species (36 CFR 219.9 as described in FSH 1909.12, chapter 20, section 23.13). For species of conservation concern, specify the ecological conditions necessary to maintain a viable population within the plan area.

Habitat Connectivity

Objection Summary

Sierra Club et al. claim that the final plan and final EIS do not address wildlife habitat connectivity in an integrated manner sufficient to conserve ecological integrity, consistent with the National Forest Management Act's "diversity requirement" and at-risk species viability requirements. The plan further fails to contribute to ecological, social, and economic sustainability by ensuring that all plans will be responsive and can adapt to issues such as climate change. The final EIS also fails to explain how the plan meets these requirements.

The objectors are concerned that the agency does not understand the connection between the plan and the final EIS. They claim that the ROD must explain how the effects disclosed within the EIS demonstrate contributions to recovery and viability, and that the planning documents must do more than just list or restate the plan components that support a conclusion; they must provide rationale for viability based on specific plan components. The objector reiterates that the agency must comply with the Endangered Species Act. The objector makes the following points:

- *Relatively recent modeling depicts the Tonto's wildlife connectivity value. It does not appear that these products were referenced or utilized, nor does the agency's response to our comments address these available planning products.*
- *In order to contribute to the recovery of threatened and endangered species, conserve species proposed or candidates for listing under the ESA, and maintain the viability of species of conservation concern, a plan must have significant beneficial effects and minimize adverse effects to the greatest extent possible. The effects analysis must be more than a subjective, qualitative, and comparative estimation—it requires in-depth analyses of significant issues, including species viability requirements.*
- *The EIS must properly characterize what the plan components direct the Forest to do. The plan components comprise the "action" that must be analyzed. The analysis must detail how specific plan components affect each ecological condition needed by each at-risk species. This requires an evaluation of both plan components that are directly related to at-risk species and the ecological conditions upon which they depend and plan components of the multiple uses that may adversely affect the species and/or the ecological conditions they depend on, such as vegetation management, livestock grazing, recreation, roads and other infrastructure, and mining. The [final] EIS fails in this regard.*

Objectors' Proposed Remedy

Revise the plan and final EIS to include site-specific plans to protect key wildlife corridors in order to preserve connectivity for wildlife habitat and increase resiliency of wildlife relative to climate change to comply with the National Forest Management Act.

Assessment

Appendix H of the final EIS was developed in response to comments received regarding wildlife habitat connectivity. The appendix explains that "the Planning Rule instructs the forest to develop a forest plan that maintains the diversity of plant and animal communities and the persistence of native species (36 CFR 219.9)…the ecological conditions that contribute to habitat connectivity can depend greatly upon

the needs of specific species…no single section of the forest plan influences the management of habitat connectivity, rather plan direction to maintain or restore connectivity is spread throughout program areas as applicable," (final EIS, volume 4, p. 478).

The plan contains desired conditions in which maintaining or restoring connectivity is a key component. Components also direct projects and activities to consider impacts to habitat connectivity and call for strategies that minimize or mitigate impacts to connectivity; and name specific strategies to restore connectivity. Table 52 identifies the plan section and components that maintain or restore habitat connectivity (final EIS, volume 4, appendix H, pp. 479-484). Additionally, appendix H (pp. 478-479) states:

> *…the full complement of plan components from the ecological sections of the plan (e.g., Vegetation and Ecological Response Units; Watersheds and Water Resources; and Riparian Areas, Seeps, Spring, Wetlands, and Riparian Management Zones) serve to restore ecological integrity, and thus improve habitat connectivity'. Since these plan components did not identify connectivity issues specifically, the decision was made to not include those components in table 52 for the purpose of brevity. The Tonto National Forest is committed to maintaining and restoring ecological integrity within Forest Service authority and consistent with the inherent capability of the plan area. This effort includes ensuring that landscapes are sufficiently connected to provide for a diversity of plant and animal communities.*

Tonto Citizen's Coalition commented on the draft EIS (part of Sierra Club et al.) that "Relatively recent modeling depicts the Tonto's wildlife connectivity value. It does not appear that these products were referenced or utilized, nor does the agency's response to our comments address these available planning products." The objector provided two references in the footnotes:

> Belote, R.T., M.S. Dietz, B.H. McRae, D.M. Theobald, M.L. McClure, G.H. Irwin, PS. McKinley, JA. Gage, and GH. Aplet. 2016. Identifying Corridors Among Large Protected Areas in the United States. PloS ONE 11(4): e0154223. Doi: 10.1371/journal.pone.0154223. Available: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0154223; and
>
> Fields, K., D.M. Theobald, and M. Soulé. 2010. Modeling Potential Broadscale Wildlife Movement Pathways Within the Continental United States. Whitepaper, July 2, 2010. Wildlands Network and Colorado State University. http://rewilding.org/rewildit/images/Wild-LifeLines_Wildlands-Network_White-Paper_low-res-copy.pdf[6]

There is no evidence in the planning record that these references were considered by the forest. Per 36 CFR 219.3, the responsible official shall document how the best available scientific information was used to inform the assessment, the plan decision, and the monitoring program. As required in 36 CFR 219.6(a)(3) and 36 CFR 219.14(a)(4), such documentation must identify what information was determined to be the best available scientific information, explain the basis for that information, and explain how that information was applied to the issue considered.

The final EIS describes the affected environment and environmental effects of the alternatives on at-risk, Regional Forester sensitive, and migratory bird species (final EIS, volume 2, pp. 1-148). The analysis

[6] The objector noted that this link was no longer valid as of November, 9, 2022.

was completed at a habitats and ecosystems dynamic (coarse-filter) level (departed habitats; poor watershed and riparian conditions; undesirable fire effects) (pp. 10-38) and a threats to species (fine-filter) level (timber; invasive species, disease, and other pathogens; recreation; mining and energy; grazing; facilities, roads, construction, and motorized access; pesticides and pollutants; and rare endemics, small populations, and restricted distribution) (pp. 39-148). Each of these sections describe and evaluate plan direction that reduces impacts to and provides for species' needs and list the plan components that address threats to at-risk species.

The response to comments addressed comments suggesting that wildlife habitat connectivity be addressed in an integrated manner sufficient to conserve ecological integrity (final EIS, volume 3, p. 334-336, comments 2970-532, 536, and 648). The forest stated:

> *…we have concluded that we do not have sufficient information necessary at this time to designate a specific area as proposed. Instead, we have opted to include plan components in the revised forest plan that address habitat connectivity throughout various program areas, and in this way provide an integrated approach that is applicable to habitats across the forest rather than a single designated area. We recognize that this integrated approach results in plan direction that may not be easily recognized as contributing to habitat connectivity because it is spread throughout various sections of the land management plan and not labeled. Due to the level of interest in this subject, we have included a crosswalk of plan components [appendix H] that contribute to the management of habitat connectivity in the final environmental impact statement. We feel that this approach appropriately meets the intent of the planning directives to promote ecological integrity (36 CFR 219.8(a) and 219.9(a)(1)) and in many ways may more effectively meet the needs of species, especially at-risk species.*

Appendix B describes the methods and assumptions made to complete the analysis for wildlife (final EIS, volume 4, pp. 47-50). Appendix G provides a crosswalk of ecological conditions and at-risk species by providing tables "that describe threats to persistence for each at-risk species and identified plan components which provide the ecological conditions necessary to 1) maintain a viable population of each species of conservation concern in the plan area, or 2) contribute to the recovery of federally listed species" (final EIS, volume 4, pp. 432-477). These tables identify a threat to a species (then list the relevant plan component and discuss the effects in chapter 3 of the final EIS). For example, one threat to Allen's big-eared bat was identified as recreation impacts to caves; CVK-G-02 was listed as a relevant plan component; and the effects of this were discussed on page 58 of the final EIS (volume 2). Additionally, the plan's biological assessment describes the relevant plan components and analyzes the effects of the plan components on threatened or endangered wildlife.

However, to demonstrate that plan components contribute to recovery for Endangered Species Act species, both the planning rule and Endangered Species Act require that explicit determinations are made regarding at-risk species (i.e., Endangered Species Act listed species and species of conservation concern). In meeting this requirement for Endangered Species Act listed species, 36 CFR 219.9 (as described in FSH 1909.12, chapter 20, section 23.13) provides direction to include a determination section for each species that makes explicit the tie between plan components, the projected changes in the environment, the stressors plan components make or manage, and the outcome for the species.

For species of conservation concern, provide ecological conditions necessary to maintain a viable population within the plan area. Provide determinations using the specific language in the planning rule regarding the requirements for the different at-risk species.

The impact of climate change on wildlife is included in the analysis. Similar to above, the tables in appendix G (final EIS, volume 4, pp. 432-477) identify a threat to a species (e.g., Fringed myotis – climate change), then list the relevant plan components (e.g., GRZ-G-03 and WAT-G-12), the effects of which were discussed in chapter 3 (volume 2, p. 72 for GRZ-G-03). Appendix H identifies plan components that maintain or restore habitat connectivity, including those components that relate to addressing climate change (final EIS, volume 4, pp. 482-483, table 52).

Cumulative effects of climate change on wildlife, fish, and plants are discussed in the plan (volume 2, p. 107).

In the response to comments (final EIS, volume 3, pp. 336-337, concern 350), the forest addressed the concern that climate change is not being addressed in the land management plan and final EIS related to wildlife, fish, and plant species by responding:

- *…we do not have sufficient data at this time to effectively identify climate refugia and provide site-specific management; rather we have attempted to provide a framework for managing all potential habitats to the best of our abilities. However, many of our ongoing and future vegetation projects are designed with climate change consideration. Many of the actions in these projects are designed to allow the ecosystem to be more resilient in the face of changing conditions.*
- *In many sections of the environmental impact statement (Chapter 3), climate change is considered in a discussion of cumulative effects over time. Additionally, analyses that discuss vital habitats for species on the Tonto National Forest (e.g., riparian areas, vegetative communities, and watersheds) work to consider information on a warming climate in their estimations of trends for such habitats. We have worked to incorporate such information; however, making predictions on the specific effects to and responses from species will be handled on a project level in compliance with forest plan direction.*
- *New species and new species communities will replace floral and faunal communities that have been around for thousands of years, but we can't know what it will look like yet. The best available science tells us that resilience and sustainability are the best tools we have for managing the land in the face of a changing climate, and we talk about those extensively in the final forest plan and the environmental impact statement.*

36 CFR 219.14(a) states that:

> *The responsible official shall record approval of a new plan, plan amendment, or revision in a decision document prepared according to Forest Service NEPA procedures (36 CFR part 220). The decision document must include: (1) The rationale for approval…In addition to meeting the requirements of paragraph (a) of this section, the decision document must include an explanation of how the plan components meet the sustainability requirements of § 219.8, the diversity requirements of § 219.9, the multiple use requirements of § 219.10, and the timber requirements of § 219.11.*

The draft ROD states that the plan will "provide for the viability of all species, including the 72 at-risk terrestrial and aquatic insect, animal, and plant species, through habitat desired conditions needed by those species, and standards, guidelines, and objectives that address species needs" (p. 11). In the draft ROD, compliance with 36 CFR 219.8 (sustainability) is demonstrated by describing where the plan includes direction for ecological and social and economic sustainability (pp. 16-18).

Compliance with 36 CFR 219.9 "Diversity of Plant and Animal Communities" is demonstrated on page 18 of the draft ROD:

> *The land management plan manages for plant and animal species that are healthy, well-distributed, genetically diverse, and connected, enabling species to adapt to changing environmental and climatic conditions. It also protects and restores rare and unique resources that support high levels of biodiversity such as springs, wetlands, aspen forests, and habitats and refugia for species that are narrow endemics or have restricted distributions or declining populations. The final plan adopts a complementary ecosystem (coarse-filter) and species-specific (fine-filter) approach to maintaining the diversity of plant and animal communities and the persistence of native species in the plan area by:*
>
> 1. *Maintaining and restoring ecosystem integrity and diversity as described above, including rare plant and animal communities and diverse native tree species (2022 Land Management Plan, Wildlife, Fish, and Plants, Ecological Response Units, Watersheds and Water Resources, Riparian Areas, Springs, Seeps, and Wetlands).*
> 2. *Including additional species-specific plan components where ecosystem components do not adequately contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area (2022 Land Management Plan, Wildlife, Fish, and Plants and appendix G of the final environmental impact statement).*
> 3. *Promoting habitat connectivity and availability to allow wildlife populations to adjust their movements in response to major disturbances and minimizing barriers to movement with new or reconstructed fencing and infrastructure to improve habitat connectivity (2022 Land Management Plan, Wildlife, Fish, and Plants, Ecological Response Units, Watersheds and Water Resources, Riparian Areas, Springs, Seeps, and Wetlands, Rangelands, Forage, and Grazing, Roads, and appendix G of the final environmental impact statement).*

Appendix B of the final EIS (volume 4, pp. 48-49) describes how species viability was evaluated:

> *In evaluating the effects of forest plan direction on population viability or persistence it is not feasible to conclude that a population simply is or is not viable. Populations of any size have an unknown probability of going extinct at some point in the future, and ecological conditions and dynamics, nature of threats, dynamics of particular species, and management actions all influence probability of persistence. Given the unknown probability of persistence (and therefore viability), the goal of this evaluation is to estimate the probability of persistence. Consequently, viability is best expressed through varying levels of risk. The risk assessment employed to evaluate species status is most strongly framed with a focus on limiting factors and threats which demands a keen understanding of ecosystem dynamics and species natural history.*

The draft ROD on page 11 states: “Provide for the viability of all species, including the 72 at-risk terrestrial and aquatic insect, animal, and plant species, through habitat desired conditions needed by those species, and standards, guidelines, and objectives that address species needs.” This language does not mirror the description of species viability evaluation in appendix B.

Consultation with the United States Fish and Wildlife Service on the plan was completed. A biological assessment requesting formal consultation for the revised plan was submitted on May 18, 2021. A biological opinion from the United States Fish and Wildlife Service was received February 1, 2022. The United States Fish and Wildlife Service (biological opinion, p. 179) concluded that:

> *Implementation of the Tonto NF Revised Land and Resource Management Plan located in Coconino, Gila, Maricopa, Pinal, and Yavapai counties, Arizona, as proposed, is not likely to jeopardize the continued existence of the endangered Arizona cliffrose, Arizona hedgehog cactus, ocelot, desert pupfish, Gila chub, Gila topminnow, razorback sucker, loach minnow, spikedace, southwestern willow flycatcher, and Yuma Ridgway’s rail; and the threatened Mexican spotted owl, Chiricahua leopard frog, narrowheaded gartersnake, northern Mexican gartersnake, Gila trout, western yellow-billed cuckoo and, in conference, the Mexican wolf and Colorado pikeminnow non-essential experimental populations. The proposed action is also not likely to destroy or adversely modify designated critical habitat for the Mexican spotted owl, Chiricahua leopard frog, narrow-headed gartersnake, northern Mexican gartersnake, desert pupfish, Gila chub, razorback sucker, loach minnow, spikedace, southwestern willow flycatcher, or the western yellow-billed cuckoo. There is no designated critical habitat for the Arizona cliffrose, Arizona hedgehog cactus, ocelot, Gila topminnow, Gila trout or the Yuma Ridgway’s rail, therefore none will be affected.*

Conclusion

I find the forest met the requirements of the planning rule (36 CFR 219.10(a)(1)) and the National Forest Management Act. Appendix H of the final EIS (volume 4, pp. 478-484, *Plan Components that Maintain or Restore Habitat Connectivity*) identifies all the plan components that maintain or restore habitat connectivity. However, this language does not mirror the description of species viability evaluation in appendix B of the final EIS.

There is also a need to make a determination call for Endangered Species Act listed species, the EIS should specifically state whether the plan does or does not provide the ecological conditions necessary to contribute to the recovery of the species. For species of conservation concern, the EIS should specifically state whether the plan does or does not ‘provide the ecological conditions necessary to maintain a viable population within the plan area. Failure to do so leaves ambiguity as to whether the plan meets the requirements of 36 CFR 219.9.

The planning record does not provide documentation that Belote et al. 2016 and Fields et al. 2010, references provided during the comment period by the objector, were reviewed.

Instructions

- Include a determination section for each species that clarifies the relationship between plan components, the projected changes in the environment, the stressors plan components make or manage, and the outcome for the species (36 CFR 219.9 as described in FSH 1909.12, chapter

20, section 23.13). For species of conservation concern, specify the ecological conditions necessary to maintain a viable population within the plan area.

- Reconcile language between the ROD and appendix B of the final EIS regarding the description of species viability evaluation (e.g., page 11 of the ROD and plan components that increase probability of viability).
- Document in the planning record how the forest considered Belote et al. 2016 and Fields et al. 2010.

Habitat Corridors and Safety

Objection Summary

Arizona Sportsmen for Wildlife Conservation contends that the plan does not address infrastructure in the context of constructing and maintaining wildlife corridors for human and wildlife safety. The objector identifies available funding through the wildlife crossings pilot program.

Objector's Proposed Remedies

- Modify WFP-G-07 by adding "crossing or corridors" as an example of a constructed feature.
- Add the following management approaches to the wildlife section:
    - Develop and use action plans to: (1) determine wildlife dispersal due to wildland fire or other landscape scale disturbances, (2) map and inventory primary wildlife migration corridors and (3) assess infrastructure alternatives for wildlife crossings where wildlife-vehicle collisions occur affecting human safety and wildlife survival.
    - Collaborate with state and federal agencies, universities, non-profit organizations, and volunteers to research, inventory, monitor, map, and record data on wildlife corridor or crossing needs. Work to develop educational materials for the public.
    - Work with partners and researchers to identify where alternative approaches to wildlife crossing or corridor management will help meet forest desired conditions and objectives.

Assessment

Plan components referenced in this assessment include:

- *WFP-G-07: New infrastructure or constructed features (e.g., fences, roads, recreation sites, facilities, drinkers, and culverts) should be designed and maintained to minimize negative impacts to the movement and dispersal of wildlife, fish, and rare plants. Infrastructure and constructed features already present that negatively impact movement and dispersal should be modified or removed when no longer in use in order to improve connectivity. Barriers may be used to protect native species or prevent movement of nonnative species.*
- *SU-DC-05: The authorization and administration of lands special uses to individuals, companies, groups, other Federal agencies, and State or local governments maintains natural resource values and protects public health and safety.*
- *RD-MA-04: Utilize the Arizona Department of Transportation Guidelines for Highways on Bureau of Land Management and National Forest System lands, or similar document, when designing, constructing, or maintaining highways that traverse forest land.*

- *WFP-DC-05: Habitats within and adjacent to the forest are sufficiently interconnected in order to allow for necessary movements and dispersal of native animal and plants, as well as promote species interactions. Habitats are connected at a landscape scale that includes adjacent lands.*
- *WFP-MA-01: Work collaboratively with State and Federal agencies (e.g., Arizona Game and Fish Department, U.S. Fish and Wildlife Service), counties, municipal governments, and nongovernment organizations to plan, prioritize, and implement projects that contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, maintain viable populations of species of conservation concern. Look for opportunities to be involved in working groups, recovery teams, and other groups focused on conserving at-risk species on the forest.*

The final EIS acknowledges that roads not covered under the forest's transportation management plan do have impacts to resources, stating in the final EIS (volume 1, p. 255):

> *There are approximately 476 miles of roads falling under the jurisdiction of other road management agencies such as interstate highways, state highways, and county roads. These roads serve as arterials providing primary access to the Tonto National Forest destinations via connecting the National Roads System. Management and maintenance of roads not under Forest Service jurisdiction are the responsibility of the respective road management agency. Although they are not under the jurisdiction of the Forest Service, use on these roads, road conditions, and maintenance activities on the roads have the potential to impact the land and other resource areas ecologically, economically, and socially.*

Various plan components and other plan content could be interpreted to address wildlife-vehicle collisions including SU-DC-05, RD-MA-04, WFP-DC-05, WFP-G-07, and WFP-MA-01. However, none of the components address the issue directly.

Public Law 117-58 (wildlife crossings pilot program) provides funding opportunities for federal agencies to address safety and wildlife survival concerns related to wildlife-vehicle collisions.

Conclusion

I find that plan components to address wildlife-vehicle collisions on roads, that are either directly managed by the Forest Service or are located on National Forest System lands, are appropriate.

Instructions

Modify WFP-G-07 by adding "crossing", as shown in bold below:

> New infrastructure or constructed features (e.g., fences, roads, recreation sites, facilities, drinkers, **crossings**, and culverts) should be designed and maintained to minimize negative impacts to the movement and dispersal of wildlife, fish, and rare plants. Infrastructure and constructed features already present that negatively impact movement and dispersal should be modified or removed when no longer in use in order to improve connectivity. Barriers may be used to protect native species or prevent movement of nonnative species.

Water and Forage Protections

Objection Summary

Arizona Sportsmen for Wildlife Conservation states that the plan does not ensure actions are taken to guarantee available and quality water or forage for wildlife, as it ensures water quality for humans, sustainable livestock grazing, plant populations for traditional uses, and sufficient flow for protection of riparian and aquatic species.

Objector's Proposed Remedies

Ensure adequate and quality water and forage by adding the following plan components, providing direct emphasis on the critical value of wildlife and its habitats and needs:

- Desired conditions
    - Wildlife habitats are resilient to disturbances, fluctuations, and extremes in the natural environment (e.g., fire, flooding, drought, climate variability).
    - Work with partners, federal and state agencies, and local governments to develop protocols to address the restoration and sustainability of important wildlife forage and cover plants to ensure that healthy sustainable plant populations are available for wildlife use and habitat.
- Management approaches:
    - Work with partners, federal and state agencies, and local governments to monitor forage and water quality and ensure forage and water quality and availability.
    - Encourage the development of water sources in uplands where possible to create available quality water when riparian areas or other natural waterways do not provide sufficient water.

Assessment

Plan components referenced in this assessment include:

- *GRZ-DC-03: Livestock grazing allows for healthy, diverse plant communities, satisfactory soil and water conditions, and sustains the quality and quantity of fish and wildlife habitat.*
- *ERU-DC-14: Ecological conditions for habitat quality, distribution, and abundance contribute to self-sustaining populations of native terrestrial and aquatic plants and animals. Conditions provide for the life history, distribution, and natural population fluctuations of plant and animal species within the capability of the ecosystem.*
- *ERU-IC-DC-11: Important forage species for wildlife, such as Wright's buckwheat and desert ceanothus, are well represented and distributed based on site potential and capability (determined by Terrestrial Ecological Unit Inventory data or other appropriate ecological data).*

Although the plan components identifying water quality and quantity and wildlife forage availability are not called out specifically in the wildlife section, these are addressed in other sections of the plan. For example, the watershed section (land management plan, p. 107) identifies desired conditions for water quality and quantity for all relevant resource areas, inclusive of terrestrial wildlife. Wildlife forage availability and quality is accounted for in plan components, such as GRZ-DC-03 and ERU-DC-14. ERU-IC-DC-11 identifies that important forage species for wildlife are well-represented and distributed based on-site potential and capability.

Additionally, appendix G of the final EIS provides a crosswalk of ecological conditions and at-risk species by providing tables "that describe threats to persistence for each at-risk species and identified plan components which provide the ecological conditions necessary to 1) maintain a viable population of each species of conservation concern in the plan area, or 2) contribute to the recovery of federally listed species" (final EIS, volume 4, pp. 432-477). These tables identify a threat to a species, then list the relevant plan component, the effects of which were analyzed. The above referenced plan components are included in the appendix G species-specific crosswalk.

Conclusion

I find that the forest adequately addressed the availability of quality water and forage for wildlife in the plan direction.

Instructions

None.

Wildland Fires in Wildlife Analysis

Objection Summary

Arizona Sportsmen for Wildlife Conservation contends that the forest erred in not including recent large scale wildland fires that affected vegetation, wildlife and wildlife habitat, and watersheds in the existing condition within the EIS's analysis. The objector is of the opinion that wildland fires should be considered a "major federal action."

Objector's Proposed Remedy

Update the analyses to reflect the changed conditions caused by the wildfires.

Assessment

Wildfire is defined as "a wildland fire originating from an unplanned ignition, such as lightning, volcanos, unauthorized and accidental human caused fires, and prescribed fires that are declared wildfires" (Fire Management Board 2019). Wildfire is not considered a major federal action, as it does not meet the definition, namely the requirement of being financed, assisted, conducted, regulated, or approved by a federal agency (40 CFR 1508.1 (q)).

36 CFR 219.3 requires that:

> *The responsible official shall use the best available scientific information to inform the planning process required by this subpart for assessment; developing, amending, or revising a plan; and monitoring. In doing so, the responsible official shall determine what information is the most accurate, reliable, and relevant to the issues being considered.*

FSH 1909.12, zero code (p. 4) defines an assessment as:

> *For the purposes of the land management planning regulation at 36 CFR part 219 and this Handbook, an assessment is the identification and evaluation of existing information to support land management planning. Assessments are not decision-making documents but provide*

current information on select topics relevant to the plan area, in the context of the broader landscape (36 CFR 219.19).

It is the responsibility of the responsible official to set the scale, scope, and timing of the assessment early in the assessment process based on what has been learned from monitoring and implementation of projects (FSH 1909.12, chapter 10, section 10.4).

FSH 1909.12, chapter 10, section 12.12 goes on to explain that the appropriate spatial and temporal scale to assess ecological integrity should be selected by considering "the scales of the disturbance processes that impact the plan area," "the scales at which key ecosystem characteristics are relevant to developing plan components" and the natural range of variation by determining the temporal scale for the natural range of variation description and describing the natural range of variation of disturbance regimes within the selected period (FSH 1909.12, chapter 10, section 12.14a).

As stated in the plan (p. 8), "The conditions, trends, and sustainability of the ecological, social, and economic resources on the Tonto National Forest were published in March 2017 (USDA Forest Service 2017a) as part of the assessment required by the planning rule (36 CFR 219.6)."

Although the "scale, scope, and timing" of the information used for the analysis was clearly set, as required by the planning rule, the analysis did acknowledge that conditions are not static. The assumptions made in the analysis of the alternatives included "large fires, and other natural events that change resources, have occurred during the planning effort. This does not impact the analysis below as the plan incorporates language to address these changes and manage for large natural events" (final EIS, volume 1, p. 63).

Conclusion

I find that the responsible official included the effects of wildfire on Ecological Response Units in the final EIS (final EIS, volume 1, pp. 292-398). The effects of undesirable fire to at-risk species were analyzed in in the final EIS (volume 2, pp. 31-37). Table 123 (final EIS, volume 2, p. 38) lists the plan components that address threats to at-risk species related to undesirable fire. Current wildfire conditions would be incorporated in subsequent project-level analysis.

Instructions

None.

Ecological Conditions for Mexican Spotted Owl Recovery

Objection Summary

Sierra Club et al. allege that the plan fails to provide the ecological conditions necessary to contribute to Mexican spotted owl recovery, in violation of the National Forest Management Act (36 CFR 219.9(a)(1) and (b)(1)), NEPA, and the Endangered Species Act. They also contend that the land management plan fails to identify management goals specific to the Mexican spotted owl. The objectors state that the plan fails to adequately address how key habitat variables from the 2012 Mexican spotted owl recovery plan (USDI 2012) will be met. The objector feels that guidelines in the plan are not sufficient, such as with the use of "should" instead of "will" for adhering to the criteria from the recovery plan in WFP-G-01 and WFP-G-03.

Objectors' Proposed Remedies

Revise the land management plan to:

- include specific standards requiring that all activities must apply objectives and measures from Mexican spotted owl recovery plans; and
- enumerate management goals for Mexican spotted owl and other at-risk species.

Update the final EIS analysis "to analyze effects on those species based on the recovery plan objectives."

Assessment

Plan content referenced in this assessment includes:

- *WFP-O-01: Implement at least 20 activities (e.g., habitat improvement projects, collaborative agreements, wildfire management) that contribute to the recovery of at-risk species every 10 years.*
- *ERU-O-01: In frequent-fire forested ecological response units (ponderosa pine forest, ponderosa pine-evergreen oak, and mixed conifer-frequent fire), emphasize treatments within the ponderosa pine-evergreen oak ecological response unit by treating:*
    a) *50,000 to 122,000 acres over a 10-year period with both mechanical treatments and fire. About 22 percent would be treated with prescribed fire, with the expectation that the rest would be treated with wildfire.*
    b) *105,000 to 325,000 acres over a 10-year period with only fire (no mechanical treatment). About 22 percent of these acres would be treated with prescribed fire, with the expectation that the rest would be treated with wildfire.*
- *ERU-DC-03: Old growth within woodland and forested ecological response units (ponderosa pine forest, ponderosa pine-evergreen oak, mixed conifer–frequent fire, pinyon-juniper grass and juniper grass, pinyon-juniper woodland, pinyon-juniper evergreen shrub, Madrean Encinal woodland and Madrean pinyon oak) occurs throughout the landscape, generally in small areas as individual old growth components, or as clumps of old growth. Old growth components include old trees, dead trees (snags), downed wood (coarse woody debris) and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). Desired conditions for wet mixed conifer/mixed conifer with aspen differ somewhat from the other forested ecological response units listed here and can be found under Landscape Scale Desired Conditions for wet mixed conifer/mixed conifer with aspen.*
- *ERU-PPE-PG-DC-01: The desired seral states, canopy cover, and structural states for the ponderosa pine-evergreen oak ecological response unit are as presented in table 14.*
- *ERU-PPF-DC-04: The desired seral states, canopy cover, and structural states for the ponderosa pine forest ecological response unit are as presented in table 15.*
- *ERU-MCD-DC-02: The desired seral states, canopy cover, and structural states for the mixed conifer-frequent fire ecological response unit are as presented in table 16.*
- *ERU-MCW-DC-01: The desired seral states, canopy cover, and structural states for the wet mixed conifer–mixed conifer with aspen are as presented in table 17.*
- *ERU-MCW-DC-03: Old growth generally occurs over large areas as stands. Old growth includes old trees, dead trees (snags), downed wood (coarse woody debris) and structural diversity. The*

location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality).

- *WFP-DC-01: Ecological conditions contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, maintain viable populations of species of conservation concern, and sustain both common and uncommon native species.*
- *WFP-G-01: Activities occurring within federally-listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans.*
- *WFP-G-02: Where the Forest Service has entered into a signed conservation agreement that provides guidance on activities or actions to be carried out by the Forest, those activities or actions should be undertaken consistent with the guidance found within the conservation agreement.*
- *WFP-G-03: The best available science and/or conservation measures should be used to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain viable populations of species of conservation concern and rare endemic species.*
- *ERU-G-04: In areas within woodland and forest ecological response units where there is little understory and mechanical treatments are proposed, slash treatments (e.g., lop and scatter and mastication) should be used to move herbaceous vegetation growth, watershed condition, soil productivity towards desired conditions, and minimize long-term impacts from invasive species. Desired and potential fire behavior and severity, soil burn severity, firefighter safety, and wildlife and livestock movement should inform any decision to leave slash on site.*
- *ERU-G-09: Vegetation management activities should retain old trees, 52 snags, and downed logs in and near stream channels and riparian areas to provide for wildlife habitat and recruitment of large woody material.*
- *ERU-PPE-G-02: Management activities should leave an average of 1 to 2 snags greater than 18 inches per acre, when these components exist on the landscape prior to treatment.*
- *ERU-PPF-G-01: Management activities should leave an average of 1 to 2 snags greater than 18 inches per acre.*
- *ERU-MCD-G-01: Management activities should leave an average of 1 to 2 snags greater than 18 inches per acre.*
- *ERU-MCW-G-1: Management activities should leave an average of 1 to 5 snags greater than 18 inches per acre.*
- *ERU-MA-04: Work closely with the U.S. Fish and Wildlife Service to address the habitat needs of the Mexican spotted owl by minimizing unnatural disturbance and providing nest/roost habitat, which includes managing for areas of closed canopy and desired levels of key structural elements (e.g., large old trees, snags, and downed woody material) in forested ecological response units. Forested ecological response units provide Mexican spotted owl habitat as discussed under the most recent, approved recovery plan for the Mexican spotted owl.*

The planning rule and FSH 1909.12, chapter 20, section 23.13 require that plans provide ecological conditions to contribute to the recovery of federally listed threatened and endangered species.

36 CFR 219.9(a)(1) states:

> *The plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore their structure, function, composition, and connectivity.*

36 CFR 219.9(a)(2) requires that the plan "include plan components, including standards or guidelines, to maintain or restore the diversity of ecosystems and habitat types throughout the plan area."

36 CFR 219.9(b)(1) requires that the responsible official determine whether or not plan components "provide the ecological conditions to: contribute to recovery of federally listed threatened and endangered species...within the plan area." FSH 1909.12, chapter 20, section 23.13 provides further direction on how to evaluate this. This evaluation discloses the relationship between the species ecology (e.g., threats, limiting factors, and important ecological conditions), plan components, and the outcomes of those components.

36 CFR 219.9(b)(1) further states that if the responsible official determines that the plan components required by 36 CFR 219.9(a) "are insufficient to provide such ecological conditions, then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area."

36 CFR 219.9(b)(2) states:

> *If the responsible official determines that it is beyond the authority of the Forest Service or inherent capability of the plan area to maintain or restore the ecological conditions to maintain a viable population of a species of conservation concern in the plan area, then the responsible official shall: (i) document the basis for that determination (219.14(a)); and (ii)Include plan components…to maintain or restore ecological conditions within the plan area to contribute to maintaining a viable population of the species within its range…*

Plan components do not explicitly reference Mexican spotted owl, but they do reference approved recovery plans and conservation agreements. ERU-MA-04 (p. 74) is specific to Mexican spotted owl habitat management but does not meet the requirements of 36 CFR 219.9(a)(1) because it is a management approach, not a plan component.

WFP-O-01 is not specific to Mexican spotted owl and is inclusive of many types of activities. It is not clear that the activities required by the objective would contribute to the recovery of Mexican spotted owl because there is no section in either the final EIS or the final plan that contains a determination of how the plan components contribute to recovery of the species.

Numerous plan components (e.g., ERU-PPE-PG-DC-01, ERU-PPF-DC-04, ERU-MCD-DC-02, and ERU-MCW-DC-01) are in place for old forest habitat, including tree diameters at least 10 inches diameter at breast height (final EIS, volume 4, appendix G, pp. 459-460).

Desired conditions (e.g., WFP-DC-01) and guidelines (e.g., WFP-G-01 and WFP-G-02) incorporate approved recovery plans and signed conservation agreements by reference. Specific terms and conditions for projects are determined by the United States Fish and Wildlife Service during the consultation process. Therefore, the land management plan does not include specific guidelines for diameters of live trees to be retained in Mexican spotted owl habitat. Specific terms and conditions for

projects would be determined by the United States Fish and Wildlife Service during the consultation process.

No standards are in place specific to Mexican spotted owl (plan, pp. 116-119). Plan components referenced in appendix G of the final EIS (pp. 459-460) do not fully incorporate the Mexican spotted owl recovery plan (USDI 2012). The record does not clearly demonstrate how the plan components contribute to Mexican spotted owl recovery. For example, while ERU-PPE-G-02, ERU-PPF-G-01, ERU-MCD-G-01, and ERU-MCW-G-01 provide goals for large snag retention and ERU-DC-03, ERU-MCW-DC-03, ERU-G-04, and ERU-G-09 reference down wood retention and protection of wildlife in even-aged harvest, the vegetation management plan components do not clearly provide primary constituent elements for Mexican spotted owl critical habitat.

The *Forestry and Forest Products* section (pp. 149-150) of the biological assessment discussed wildlife effects in general, but it lacked clarity and did not analyze effects to Mexican spotted owl. However, the *Vegetation and Ecological Response Units* (ERU) section of the biological assessment (pp. 152-155) analyzed habitat for Mexican spotted owl on an appropriate plan level.

Conclusion

In order to make it clear that the plan components do contribute to recovery for Endangered Species Act listed species both the 2012 planning rule and Endangered Species Act require that explicit determinations are made regarding at-risk species (i.e., Endangered Species Act listed species and species of conservation concern). In meeting this requirement for Endangered Species Act listed species, include a determination section for each species that makes explicit the tie between plan components, the projected changes in the environment, the stressors plan components make or manage, and the outcome for the species (36 CFR 219.9, as described in FSH 1909.12, chapter 20, section 23.13).

Specifically, 36 CFR 219.9 requires that:

> *The responsible official shall determine whether or not the plan components required by paragraph (a) of this section provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area.*

Instructions

- Clarify in the final EIS how restoration of ponderosa pine and mixed conifer vegetation types contribute to the recovery of Mexican spotted owl, such as is documented in the biological opinion.
- Provide a determination section in the EIS and optionally in the plan to clarify how the plan will contribute to the recovery of Mexican spotted owl.
- Include the Southwestern Region's Mexican spotted owl strategy in the planning record, which provides a framework to ensure that all vegetation management projects in Mexican spotted owl habitat are compliant with the approved Mexican spotted owl recovery plan(s). A 2021 Regional Forester letter outlines guidance for implementing the Mexican spotted owl management strategy and includes six measures as the foundation for the conservation and recovery program for this species in the Southwestern Region.

- Add clarification that the forest will generally prioritize retention of the largest trees at a site during restoration treatments, unless exceptions are needed to meet specific objectives related to forest health or other needs.
- Correct the following clerical errors:
  - Replace”-15” with “-1” in ERU-MCW-G-15.
  - Replace “pant” with “plant” in WFP-G-04.

Mexican Spotted Owl Monitoring

Objection Summary

Sierra Club et al. allege that the plan fails to address monitoring requirements for Mexican spotted owl abundance and habitat quantity distribution as required by the 2012 Mexican spotted owl recovery plan (USDI 2012) and to address monitoring and other key requirements identified in the biological opinion.

Specifically, the objector states the plan’s monitoring program fails to:

- Monitor for Mexican spotted owl abundance and distribution to analyze the cumulative impacts of all management activities on Mexican spotted owl; and
- Identify Mexican spotted owl recovery habitat or the estimated acres associated with recovery habitat; and
- Identify Mexican spotted owl potential nesting or roosting habitat or the estimated acres associated with potential nesting or resting habitat; and
- Provide necessary precision; and
- Capture essential habitat features needed by Mexican spotted owl such as canopy cover, large tree basal area, and other metrics; and
- Provide clear direction to accomplish the monitoring guidelines specified in the recovery plan, leaving planning and implementation of individual projects up to the judgement of district level managers.

Objectors’ Proposed Remedies

Revise the plan to:

- Identify, map, and manage for Mexican spotted owl recovery habitat as defined in the 2012 recovery plan; and
- Delineate required pre-and post-project monitoring consistent with the 2012 recovery plan (USDI 2012) for all activities, including, but not limited to, forest management activities (thinning, logging, prescribed burns), livestock grazing, oil and gas development, mining, and recreation (in particular, motorized recreation); and
- Conduct spotted owl surveys to determine how owls modify their territories in response to fuels treatments, forest restoration, and wildland fire.

Assessment

The plan component referenced in this assessment includes:

> *WFP-G-01: Activities occurring within federally-listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans.*

Mexican spotted owl recovery plan

As stated in response to comments (final EIS, volume 3, pp. 331-332, comment 2970-498), the recovery plan (USDI 2012) provides guidance, but it is not a regulatory document. The forest documents the intention to follow the recovery plan in WFP-G-01. The biological assessment discloses the number of protected activity centers and acres in protected activity centers on the forest (biological assessment, pp. 144-145), indicating that Mexican spotted owl habitat has been identified and mapped as suggested by the objector.

Pre-and post-project monitoring

Table 22 (vegetation, fire, and forest products) in the plan's monitoring program identifies presence/absence of Mexican spotted owl as an indicator of ecological response to management and sufficiency of snags, down wood, and large old trees at a midscale level.

The land management plan includes a monitoring program with Mexican spotted owl identified as a focal species (p. 164). Monitoring questions and assessment indicators to assess the effectiveness of plan components for vegetation, fire, and forest products treatments are included in the monitoring program. Mexican spotted owl presence/absence is identified as an associated indicator for vegetation characteristics including moving ecological response units toward desired conditions and whether the snags, downed wood, and large old trees are at the desired level (land management plan, pp. 169-171, table 22).

Spotted owl surveys

Spotted owl surveys are conducted as part of a regional effort (land management plan, p. 164). At-risk species surveys are identified as an associated indicator for management activities improving wildlife habitat, with a measurement interval of two years (land management plan, p. 172, table 23). The biological assessment states that Mexican spotted owl surveys have been conducted annually since 1984 (p. 144). It may be inferred that annual surveys would continue but the land management plan does not include a clear commitment to annual surveys outside of the guideline to follow recovery plans. The biological opinion includes a conservation recommendation to work with the United States Fish and Wildlife Service to conduct spotted owl surveys to monitor owl responses to forest management treatments and wildfire. These United States Fish and Wildlife Service conservation recommendations are not referenced in the decision. It may be inferred that table 22 of the monitoring program (land management plan, pp. 169-171) corresponds to this recommendation, but it could be clarified.

Conclusion

I find that the land management plan meets law, regulation, and policy in terms of Mexican spotted owl monitoring, and WFP-G-01 expresses the forest's intent to follow the recovery plan. Additionally, Mexican spotted owl is included in the monitoring program generally as an at-risk species and as a focal species. The monitoring program is consistent with FSH 1909.12, chapter 30, section 32 for pre-and post-project monitoring.

Spotted owl surveys are conducted as part of a regional effort. Include in the planning record the intent of the forest to continue working with the United States Fish and Wildlife Service to conduct spotted owl surveys to monitor owl responses to forest management treatments and wildfire.

The biological assessment discloses the number of protected activity centers and acres in protected activity centers on the forest (biological assessment, pp. 144-145), indicating that Mexican spotted owl habitat has been identified and mapped as suggested by the objector.

Instructions

Clarify the monitoring that the forest intends to conduct for Mexican spotted owls and reference United States Fish and Wildlife Service's conservation recommendation from the biological opinion. (pp. 185-188).

Cumulative Effects Analysis for Mexican Spotted Owl

Objection Summary

Sierra Club et al. state that the final EIS fails to adequately analyze the cumulative effects on Mexican spotted owl populations and recovery. Specifically, the objector states that the final EIS assumes that all projects will comply with the Mexican spotted owl recovery plan (USDI 2012) and defers site-specific analysis to those future projects, thereby impeding a proper cumulative effects analysis for the land management plan itself.

Objectors' Proposed Remedies

- Revise the final EIS to analyze cumulative effects of the vegetation treatments proposed under the plan.
- Ensure viable populations of Mexican spotted owl and consistency with the Mexican spotted owl recovery plan (USDI 2012).
- Analyze an alternative that would minimize impacts to Mexican spotted owl populations and habitat.

Assessment

Under the Endangered Species Act, cumulative effects analysis considers effects of future state or private activities, not involving federal activities, that are reasonably certain to occur within the action area of the federal action subject to consultation (Endangered Species Act, Section 402.02). Federal actions, including vegetation management, that could potentially affect the species are federal activities and therefore subject to additional Section 7 consultations (biological opinion, pp. 132-133).

The cumulative effects analysis in the biological assessment (p. 162), includes a list of future non-federal actions reasonably certain to occur and a conclusion that "undetermined interactions and cumulative effects may likely occur" at the wildland-to-developed private land interface. All future federal actions that could potentially affect Mexican spotted owl will require project-specific analysis and consultation. The biological opinion includes a detailed cumulative effects analysis of non-federal activities (pp. 132-133).

Under the planning rule, analysis of cumulative effects is required in terms of ecological sustainability (36 CFR 219.20(a)(2)). Mexican spotted owl is included in the final EIS (volume 2, pp. 106-107) analysis of at-risk species, including cumulative effects analysis. As the ecological sustainability analysis "must be conducted at the scope and scale determined by the responsible official to be appropriate to the planning decision" (36 CFR 219.20(a)(2)), the requirement in the planning rule is met.

Conclusion

I find the responsible official complied with Endangered Species Act and planning rule direction for analyzing cumulative effects.

Instructions

None.

Mexican Gray Wolf Recovery

Objection Summary

Sierra Club et al. allege that the plan and final EIS fail to provide plan direction to conserve and recover the Mexican gray wolf. The objector states the Mexican Wolf Experimental Population Area is ignored in the land management plan, even though the species is associated with many ecological response units, and that there are not any plan components in the final plan that adequately address wolf recovery or that would provide management direction for when wolves populate the forest.

The objector describes several references and associated claims:

- Recommendations from the Science and Planning Subgroup of the United States Fish and Wildlife Service's Mexican Wolf Recovery Team, including the "three major core areas" described in the Draft Mexican Wolf Revised Recovery Plan, in particular the Mexican Wolf Experimental Population Area; and
- The 2015 final rule that expanded the Mexican Wolf Experimental Population Area; and
- Carroll et al. 2006 and Carroll et al. 2014 to demonstrate that ten national forests, including the Tonto National Forest, provide habitat connectivity that can contribute to the conservation and recovery of Mexican gray wolves.

Objectors' Proposed Remedy

Revise the plan and final EIS to expressly identify and address the fine-filter needs of the Mexican gray wolf, using the best available scientific information.

Assessment

The United States Fish and Wildlife Service concurs with the forest's determination of *not likely to jeopardize* the nonessential experimental population of Mexican gray wolves (biological opinion, p. 250).

The forest expects this species to have an increased presence in the future (biological assessment, p. 142). I find that the plan provides sufficient plan components (WFP-DC-01, WFP-G-01, and WFP-G-02) to support recovery plans, conservation agreements, and coordination with the Mexican Wolf Interagency Field Team in order to provide for the future expected increase in Mexican gray wolf occupancy on the forest. The Mexican gray wolf population in Arizona and New Mexico is not essential to the continued existence of the species because it is designated as a nonessential, experimental population (biological assessment, p. 143). In addition, no pack activity, dens, or rendezvous sites is known to occur on the forest. Mexican gray wolf was analyzed as a federally listed species in the biological assessment (pp. 130-143) and as an at-risk species in the final EIS (final EIS, volume 2, pp. 14-107). The forest made a determination of not likely to jeopardize Mexican gray wolf and stated that "the forest may take numerous actions that contribute to the recovery of species that are not specially named in the plan"

(biological assessment, pp. 142-143). There is no single statement in the planning record that the plan would "provide the ecological conditions necessary to contribute to the recovery of the species", although it can be inferred from the not likely to jeopardize determination and the subsequent concurrence from the Service.

In response to comments (final EIS, volume 3, pp. 330-331, concern 345), the forest provides rationale for not basing plan components on specific documents in order to provide a long-term framework and space to incorporate the best available scientific information for the species. Plan components to support recovery plans and conservation agreements are general and not specific to Mexican gray wolf. The land management plan includes rationale for this approach as a long-term framework to incorporate the best available scientific information rather than incorporate the current best available scientific information, which would limit the use of future best available scientific information.

The objector lists references they think should be included as best available scientific information. The 2015 final rule on Mexican wolves is included as a reference in the biological assessment. The biological assessment also references the 2017 version of the Mexican Wolf Recovery Plan (USDI 2017). Carroll et al. (2006) is not cited in the planning record.

Conclusion

I find that the plan provides sufficient plan components (WFP-DC-01, WFP-G-01, and WFP-G-02) to support recovery plans, conservation agreements, and coordination with the Mexican Wolf Interagency Field Team in order to provide for the future expected increase in Mexican gray wolf occupancy on the forest.

Instructions

Include a literature review of the references provided by the objector during the comment period in the record.

WATERSHED AND RIPARIAN AREAS

Watershed Guidelines

Objection Summary

Pinto Valley Mining Corporation claims the forest violates the planning rule (36 CFR 219.7(e)(1)(iv) and 36 CFR 219.10(a)) because watershed guidelines do not meet legal requirements, provide for ecosystem services, multiple uses, or integrated resource management. The objector states the forest ignores both state water law, and exploration and mineral development legal requirements.

The objector claims that WAT-G-05 is inconsistent with regulations on watersheds that feed into municipal watersheds and circumvents requirements at 36 CFR 251.19, and that the guideline fails to provide flexibility to consider integrated resource management and other multiple use prescriptions.

Further, the objector is not satisfied with the forest's response to comments on WAT-G-05 (final EIS, volume 3, p. 322, comment 2925-00) because the flexibility afforded in guidelines is applicable if the intent of the guideline is met.

Objector's Proposed Remedies

- Reconsider Pinto Valley Mining Corporation's proposed revisions to WAT-G-01, WAT-G-03, WAT-G-04, WAT-G-06, and WAT-G-07.
- Remove WAT-G-04 and WAT-G-14.

Assessment

The plan components referenced by the objector include:

- *WAT-G-01: When existing groundwater wells on National Forest System lands are proposed for improvement that increase the amount of water pumped or deepen the well, adverse impacts to groundwater dependent ecosystems (e.g., wetlands, riparian areas, springs, streams, and fens) should be evaluated, and measures to eliminate, mitigate, or reduce impacts should be implemented.*
- *WAT-G-03: New wells on National Forest System lands and new pipelines across National Forest System lands should avoid adversely impacting nearby wells on adjoining private lands.*
- *WAT-G-04: New water supply needs for Forest Service uses (e.g., livestock watering and recreation uses) should be met with groundwater supplies, provided that this development does not adversely impact groundwater dependent ecosystems or surface water resources.*
- *WAT-G-05: Activities that could impact groundwater or surface water quality should be located outside Source Water Protection Areas to prevent potential impacts.*
- *WAT-G-06: New or reconstructed roads and motorized routes, infrastructure, recreation sites, or similar constructed facilities should not be located within floodplains or within 300 feet of water resource features (e.g., perennial and intermittent streams, springs, wetlands, and riparian areas), except where necessary for stream crossings or to provide for resource protection to avoid the long-term adverse impacts associated with the occupancy and modification of floodplains and water resource features.*
- *WAT-G-07: Consistent with existing water rights; permitted water uses, water diversions, or obstructions should allow sufficient water to pass downstream to preserve minimum levels of water flow that maintain riparian and aquatic desired conditions.*
- *WAT-G-14: Groundwater and surface water on National Forest System lands should be managed as one hydrologically connected system.*

The objector does not believe that the plan's watershed guidelines (pages 108-109) allow for ecosystem services and multiple uses in relation to mining. Thus, in their opinion, the watershed guidelines do not meet legal requirements.

36 CFR 219.10(a)

36 CFR 219.10 directs that the agency must "…provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish, within Forest Service authority and the inherent capability of the plan area…" 36 CFR 10(a) specifically directs that a plan "must include plan components…for integrated resource management to provide for ecosystem services and multiple uses…" In the development of this, the responsible must consider multiple factors, including mineral resources (36 CFR 219.10(a)(2)) in the plan area.

36 CFR 251.19

This section governs the exercise of water and related rights reserved by the grantor of lands conveyed to the United States under the provisions of the act of March 1, 1911 (36 Stat. 961):

> *(a) All reasonable precautions shall be taken by the grantor and all persons acting for or claiming under him to prevent and suppress forest fires upon or threatening the premises or other adjacent lands of the United States, and any person failing to comply with this requirement shall be responsible for any damages sustained by the United States by reason thereof.*
>
> *(b) All slash and debris resulting from the cutting and removal of timber shall be disposed of as directed by the Forest Officer in charge.*
>
> *(c) Flowage and reservoir areas shall be cleared of timber and debris, in a manner satisfactory to the Forest Supervisor, or in accordance with a special agreement approved by him. Timber cut and destroyed in the exercise of the reserved rights shall be paid for at rates to be prescribed by the Forest Officer in charge, which rates shall be the usual stumpage price charged in the locality.*
>
> *(d) The water surface created shall be open to the Forest Service and its permittees when such use does not interfere with the original purpose of the development.*
>
> *(e) The water surface shall be open to fishing by the public in accordance with State laws when such use does not interfere with the original purpose of the development.*
>
> *(f) Plans for dams and supplemental structures, impounding or controlling more than 10 acre-feet of water or with a head in excess of 6 feet, shall be approved by the Regional Engineer of the Forest Service before construction shall begin.*

The response to comments, (final EIS, volume 3, p. 113, comment 2816-46) states:

> *The Forest Plan provides the vision, strategy, and constraints that guide integrated resource management, provide for ecological sustainability, and contribute to social and economic sustainability on the forest and within the broader landscape, while directing the coordination of multiple uses." This response is a good acknowledgement of the requirements but there is a need for additional information on how the plan is in compliance with §§ 219.8 and 219.9.*

Both the forest and Pinto Valley Mining Corporation agree on the definition of a guideline as defined in 36 CFR 219.7(e)(1)(iv). However, the objector believes the guidelines, as written, are ignoring "legal requirements applicable to state water law, exploration and mineral development."

In the response to comments (final EIS, volume 3, p. 319, comment 2925-00; p. 113, comment 2816-46; and p. 110, comment 2925-74), the forest explains that the terms of the guidelines can be departed from so long as the intent is met. The objector is skeptical because they believe the guidelines would be difficult to change.

Further, in response to comments, the forest asserted that all future site-specific projects (including those related to mining) must follow plan direction (final EIS, volume 3, p. 127, comment 44-6, et al.). However, if a project cannot follow the land management plan, as written, then the forest would work with the project proponent to modify the proposal, reject the proposal, or amend the plan.

These actions (modification, rejection, or amendment of the land management plan) related to the site-specific proposal would ensure that applicable laws (i.e., Multiple-Use Sustained-Yield Act, mineral operations regulated under 36 CFR Part 228, Subpart A) would be followed while still meeting plan direction.

Conclusion

I find these actions (modification, rejection, or amendment of the land management plan) related to the site-specific proposal would ensure that applicable laws (e.g.,, Multiple-Use Sustained-Yield Act, 36 CFR Part 228, Subpart A) would be followed while still meeting plan direction. If a project cannot follow the land management plan, as written, then the forest would work with the project proponent to modify the proposal, reject the proposal, or amend the plan.

Instructions

None.

Impaired and At-Risk Watersheds

Objection Summary

Freeport-McMoRan states that the forest is incorrect to assert that "every plan must identify watersheds that are impaired or at risk for priority maintenance or restoration" (land management plan, p. 13). The objector cites 36 CFR 219.7(f)(i) and states there is no mention in the regulations of impaired or at-risk watersheds. The objector also states that the forest's response to comments submitted on the draft EIS on this topic (final EIS, volume 3, pp. 308, comment 2816-49) are essentially supportive of the concern because they refer to the Forest Service Watershed Condition Framework (WCF) and not regulation.

Objector's Proposed Remedy

Remove the concept of impaired or at-risk watersheds from the plan.

Assessment

In both the draft and final plans, the forest adds in the term "impaired or at risk" for priority for maintenance or restoration under the required plan content section (p. 13). The terms "impaired or at-risk" are associated with the Watershed Condition Framework (USDA 2011a, pp. 2-3), which rates watersheds as functioning properly, functioning at risk, or impaired. This is part of the process that is used to determine those watersheds which will be chosen as priority watersheds for maintenance or restoration through the final planning cycle. The forest may use impaired or at-risk watersheds, as determined through the Watershed Condition Framework process, to determine their priority watersheds over the life of the land management plan.

Conclusion

I find that the addition of the "impaired or at-risk watersheds" verbiage does not change the intent of 36 CFR 219.7 (f)(1), as described in the required plan content on page 13 of the plan.

Instructions

None.

Watershed Restoration Action Plan

Objection Summary

Freeport-McMoRan asserts that WAT-MA-01 is overly broad and will lead to an arbitrary and capricious interpretation or application. The objector highlights wording added between the draft and final plans that says "forest leadership and…identifying priority watershed, develop watershed restoration action plans as well as other restoration activities…"

Objector's Proposed Remedy

Revert WAT-MA-01 to language in draft plan.

Assessment

The plan content referenced by the objector includes:

> *WAT-MA-01: Work with forest leadership and partners to identify priority watersheds, develop watershed restoration action plans as well as other restoration activities to leverage resources, and to implement and monitor projects that improve vegetative composition, reduce erosion, and/or otherwise improve watershed function.*

The changes between draft and final plan focused on working with forest leadership in an interdisciplinary team structure, identifying priority watersheds and developing watershed restoration action plans. This change is consistent with the FSH 1909.12, chapter 20, section 22.31, which states (p. 46):

> *The identification of priority watersheds for the plan will use an Interdisciplinary Team process, where the Responsible Official approves the priority watersheds. The Responsible Official should reach out to local, State, Tribal, other Federal agencies, and interest groups when identifying priority watersheds.*

Additionally, the Watershed Condition Framework regulations at 16 USC 6543 direct the forest to coordinate with interested partners and groups when developing priority watersheds, as well as to develop watershed protection and restoration plans for those watersheds. The response to comments (final EIS, volume 3, pp. 307-308, comment 2925-75) describes why the forest made the updates to WAT-MA-01 from draft to final plan and explain how it is supported by law, regulation, and policy.

Conclusion

I find that the updates to WAT-MA-01 brings the management approach more in alignment with law, regulation, and policy outlined in FSH 1909.12, chapter 20, section 22.31 and the Watershed Condition Framework (16 USC 6543), which guides the forest to develop watershed restoration plans after determining priority watersheds. The forest has adequately explained why they made updates between draft and final.

Instructions

None.

Validity of Riparian Areas, Seeps, Springs, Wetlands, and Riparian Management Zones Plan Components

Objection Summary

Freeport-McMoRan and Pinto Valley Mining Corporation collectively assert that plan content for Riparian Areas, Seeps, Spring, Wetlands, and Riparian Management Zones (pp. 111-115) exhibits systemic inconsistences with law, regulation, and policy.

Objectors claim it is unclear in the plan that the operable definition of "riparian area" is consistent with applicable law, regulation, and policy. Objectors cite 36 CFR 219.8(a)(3)(ii) and Arizona Revised Statue 37-1101(10) on this point. Objectors also cite the definition of "riparian areas" on page 4 of *RMAP: Regional Riparian Mapping Project* (USDA 2013, revised 2018), on page 113 of the *Ecological Response Units of the Southwestern United States* (USDA 2013), and in the final EIS (volume 1, p. 399). The objectors also state that 36 CFR 219.1(g) requires plan components be within the Forest Service's legal authority.

Freeport-McMoran takes specific issue with suggestions in the plan that:

- Riparian areas extend into ephemeral streams or drainages. The objector states they can only be located in close proximity and contiguous to a lake, perennial and intermittent streams, or open water wetlands; or
- Ponds have potential to create a riparian ecosystem requiring protection in the plan.

Freeport-McMoRan also states the forest's response to comments on these points on the draft EIS (final EIS, volume 3, pp. 236-37, 2970-479; pg. 244, 2816-78) were insufficient. The objector notes the references to FSH 1909.12, chapter 20, section 23.11e are irrelevant, because the reference to incorporating dry washes is limited to "considerations that the [Forest Service] will make when establishing the widths of riparian management zones contiguous to lakes, perennial and intermittent streams, and open water wetlands." The objector further states that riparian management zone plan components "are confusing, will lead to an overly burdensome and costly assessment, and is an arbitrary and capricious approach to assessment and structure."

They continue to allege that riparian management zone plan components, such as RMZ-S-02, 03 and RMZ-G-05, "will result in proposed activities in vast areas of watersheds having to establish their own [riparian management zones], then demonstrate plan consistency and overcome the standard and guidelines which improperly preclude many types of activities."

Lastly, Freeport-McMoRan claims that the mapping for riparian ecological response units is insufficient and did not provide for full analysis of impacts.

Objectors' Proposed Remedies

Freeport-McMoRan:

- Revise the stated sections of the plan to be consistent with the applicable regulations.

- Include a definition of "riparian area" in the plan consistent with how it is defined in the final EIS.
- Strike any mapping relied upon by the Forest Service that does not conform to this operational definition of "riparian area."
- Remove the following plan content: p. 112, paragraph 3 (beginning "The planning rule requires…" through p. 113, paragraph 1 (ending "as described in FSH 1909.12 (23.11e)").

Pinto Valley Mining Corporation:

- Revise the final EIS to: 1) identify proposed riparian areas on attached maps; 2) establish widths for proposed riparian management zones for lakes, perennial and intermittent streams, and open water wetlands only; and 3) develop separate plan components for riparian areas and riparian management zones using the criteria in 36 CFR 219.8(a)(3), and do so in the plan, rather than deferring to the project-level, consistent with 36 CFR 219.8(a)(3)(ii)(A).
- Alternatively, and at a minimum, remove language in the plan that expands riparian management zone plan components to "all riparian areas, streams, springs, seeps and wetlands" and/or "ephemeral channels with little or no riparian vegetation." In addition, remove RMZ-S-02, RMZ-S-03, and RMZ-G-05.

Assessment

The plan components referenced in this assessment include:

- *RMZ-S-01: All projects in riparian areas shall identify and delineate the riparian management zone.*
- *RMZ-S-02: Refueling, maintaining equipment, and storing fuels or other toxicants shall not occur in riparian management zones, except in the Lakes and Rivers Management Area.*
- *RMZ-S-03: Projects within the riparian management zone that use herbicides or pesticides will establish application buffer areas based on project objectives, the size of the project area, characteristics of the chemicals to be used, and application methods.*
- *RMZ-G-05: Activities that modify stream channels currently in proper functioning condition (evaluated using Proper Functioning Condition Assessment or similar protocol) that would result in a nonfunctioning system should not be authorized.*

Both the planning rule at 36 CFR 219.8(a)(3) and FSH 1909.12, chapter 20, section 23.11e require plans identify riparian areas and include management direction for these riparian areas. For example, FSH 1909.12, chapter 20, section 23.11(e) (p. 68) states that:

> *When establishing riparian management zones, the Interdisciplinary Team should consider: a. Available information on the location and extent of surface waterbodies, springs, wetlands, vegetation, soils, geomorphology, topography, and other relevant information.*

Further, 36 CFR 219.8(a)(3)(ii) requires that "plans must establish width(s) for riparian management zones…"

The riparian management zone section of the plan contains RMZ-S-01, which suggests that only projects in riparian areas need to delineate a riparian management zone. Other parts of the plan suggest all projects need to identify riparian zones and not just projects in riparian areas. This should be reconciled. The plan includes a description of how riparian management zones were identified, "The first approximation of the riparian management zones will be based on riparian ecological response units

(riparian ERUs)" and they also include "any updates to the riparian ecological response units or any new mapping effort based on the best available science should be incorporated as the first approximation of the riparian management zones. The riparian management zones will be further modified through site-specific delineations during project level planning" (plan, p. 112).

Page 399 of volume 1 of the final EIS states that there are 84,776[7] acres of riparian zones; this is approximately 2.8 percent of the forest. This demonstrates that the designated acres as riparian management zones is limited, contrary to the objection point that there are unlimited channels without riparian vegetation that would be protected under this standard.

Page 113 of the plan states:

> *…a riparian management zone can be modified to incorporate ephemeral channels with minimal or no riparian vegetation that support riparian vegetation downstream due to subsurface flow through the stream channel or adjacent alluvial sediments as described in FSH 1909.12 (23.11e).*

The possibility of dry washes being designated as riparian zones was included in RMZ-S-01 and in the response to comments (final EIS, volume 3, p. 235, comment 2970-486; pp. 236-237, comment 2970-479; and p. 244, comment 2816-78).

Additionally, the response to comments (final EIS, volume 3, pp. 236-237, comment 2970-479,) stated that:

> *The riparian management zone does not include dry washes that only flow in direct response to a precipitation event and therefore do not support distinctive riparian plant communities described above. The exception specified in the definition of the riparian management zone are those dry washes or channels with minimal or no riparian vegetation that have riparian vegetation downstream due to subsurface flow through the stream channel or adjacent alluvial sediments as described in [FSH] 1909.12 (23.11e).*

RMAP: Regional Riparian Mapping Project (USDA 2013, revised 2018, p. 2) states that:

> *Vegetation mapping and classification are fundamental to the management and study of natural resources. Analyses of aquatic systems require basic information on the distribution of riparian vegetation. To meet the needs of the US Forest Service (USFS) and other resource organizations, a base-level map of riparian plant communities was developed using concepts of ecological systems (Comer et al. 2003) and potential vegetation (Hansen et al. 1995). This document outlines the Regional Riparian Mapping Project (RMAP) and the development of map data for riparian corridors of the USFS Southwestern Region.*

While *RMAP: Regional Riparian Mapping Project* (USDA 2013, revised 2018) discussed vegetation in relation to a declining water table due to water extraction, it did not discuss how the use of riparian management zone in the absence of riparian vegetation could help solve this problem. It also did not discuss why dry washes need to be protected as riparian areas.

[7] *RMAP: Regional Riparian Mapping Project* (USDA 2013, revised 2018) acres differ from those in the plan because the Regional Riparian Mapping Project evaluated both private and public lands.

It is not clear that what is required by FSH 1909.12, chapter 20, section 23.11e is addressed in the final plan. While the plan contains maps of riparian areas on the forest, it did not clearly demonstrate the extent of "dry washes or channels with minimal or no riparian vegetation that have riparian vegetation downstream due to subsurface flow through the stream channel or adjacent alluvial sediments" (land management plan p. 113).

The plan does not clearly provide justification of why a riparian management zone can be modified to include ephemeral channels with little or no riparian vegetation, nor does it clearly explain why there is a need to protect "dry washes with…no riparian vegetation that have riparian vegetation downstream due to subsurface flow through the stream channel" (p. 112).

The final plan does not document the differences between the two different types of dry washes. The final EIS does not clearly provide an explanation of why these areas are important to be protected as riparian management zones.

The final EIS (volume 2, p. 276) and the final plan (p. 111) have consistent definitions for riparian areas:

> *Three-dimensional ecotones [the transition zone between two adjoining communities] of interaction that include terrestrial and aquatic ecosystems that extend down into the groundwater, up above the canopy, outward across the floodplain, up the near-slopes that drain to the water, laterally into the terrestrial ecosystem, and along the water course at variable widths (36 CFR 219.19).*

The two definitions in *RMAP: Regional Riparian Mapping Project (*USDA 2013, rrevised 2018) and in *Ecological Response Units of the Southwestern United States* (USDA 2013) were adapted for mapping and operational purposes specific to the region's ecosystem. This operational definition is consistent with the Southwestern Region's FSH 2509.23 and with FSM 2500, chapter 2520, section 2526.05.

Conclusion

I find that the definition of riparian areas, as described in the forest plan and glossary of the final EIS is consistent with applicable regulation and policy. However, the presence of subsurface water flow in the absence of riparian vegetation may warrant protection as a riparian area but that would require a more through explanation of what types of information would be considered at the project level.

I could not find the rational for why or approximately how many areas of washes without riparian vegetation could be protected or how the analysis of "dry washes with … no riparian vegetation that have riparian vegetation downstream due to subsurface flow through the stream channel" would be undertaken.

The riparian management zone section of the plan contains a standard (RMZ-S-01) which, as written, suggests that only projects in riparian areas need to delineate a riparian area. Other parts of the plan suggest all projects need to identify riparian zones, and not just projects in riparian areas.

Instructions

- Clarify in the plan (e.g., pp. 112-113) why "dry washes with…no riparian vegetation that have riparian vegetation downstream due to subsurface flow through the stream channel" should be designated as riparian areas. Alternatively, remove "or no" from page 113 of the plan: "Finally, a

riparian management zone can be modified to incorporate ephemeral channels with minimal or no riparian vegetation that support riparian vegetation downstream due to subsurface flow through the stream channel or adjacent alluvial sediments as described in FSH 1909.12 (23.11e)."

- Include a rational for why or approximately how many areas of washes without riparian vegetation could be protected or how the analysis of "dry washes with … no riparian vegetation that have riparian vegetation downstream due to subsurface flow through the stream channel" would be undertaken.
- Remove "in riparian areas" from RMZ-S-01 to clarify the need to limit projects in riparian areas: "All projects in riparian areas shall identify and delineate the riparian cmanagement zones."

Watershed Condition Framework

Objection Summary

Pinto Valley Mining Corporation claims the forest failed to coordinate under the Watershed Condition Framework requirements in classifying and identifying priority watersheds. They contend that the forest's adherence to *Watershed Condition Framework: A Framework for Assessing and Tracking Changes to Watershed Condition* (USDA 2011b) is outdated, amounts to a patchwork of formal and informal policies, and results in identifying nine priority watersheds while classifying others as impaired, at-risk, or functioning properly without the required coordination under the Watershed Condition Framework, referencing pages 308, 320, and 321 of the response to comments.

The objector highlights in the response to their comments on the draft EIS (pages 3-5 and attachments 1-4 through 1-7) that the forest misses the point that the Watershed Condition Framework process must include the "mandated coordination at all stages of the process (e.g., evaluation, identification of priority watersheds, developing protection and restoration action plans for priority watersheds and implementation of action plans)."

Lastly, they state that the forest's rationale in the response to comments (final EIS, volume 3, pp. 307-308, comment 2925-75) for adding WAT-MA-01 to the final plan is aspirational and an admission that the forest has not met its obligations under the Watershed Condition Framework.

The objector claims the forest has not adhered to the following regulations:

- 36 CFR 219.7(f)(1)(i) – Identify watershed(s) that are a priority for maintenance or restoration.
- 16 USC 6543(a)(1) – The Watershed Condition Framework requires an evaluation and classification of the condition of the watershed in the identification process.
- 16 USC 6543(a)(2) – The identification and restoration of priority watersheds is limited to five per forest.
- 16 USC 6543(a)(3) – There must be a watershed protection and restoration action plan for each priority watershed.
- 16 USC 6543(b) – "The Forest Service shall coordinate with interested non-Federal landowners and State, tribal, and local governments within the relevant watershed; and provide for an active and ongoing public engagement process in carrying out all six of the [Watershed Condition Framework] purposes."

Objector's Proposed Remedies

- Engage in the required coordination efforts to re-evaluate the watershed conditions and identify priority watersheds; prepare a supplemental EIS to allow for further public input.
- Move WAT-MA-01 to a standard.
- Reconsider including the Pinto Valley Mining Corporation's proposed language changes for WAT-DC-01 through -03.

Assessment

The plan components referenced by the objector include:

- *WAT-DC-01: Watersheds support multiple uses (e.g., timber, recreation, grazing, cultural) with no long-term decline in ecological conditions as measured by the Watershed Condition Framework or an equivalent method and provide high-quality water for downstream communities dependent on them.*
- *WAT-DC-02: Surface water and groundwater quality, meets or exceeds applicable state water quality standards, fully supports designated beneficial uses, maintains or moves ecological conditions to low departure from reference conditions, and meets the needs of downstream water users.*
- *WAT-DC-03: Watersheds are functioning properly (based on criteria provided in the Watershed Condition Framework or similar current protocol) and they exhibit high geomorphic, hydrologic, and biotic integrity relative to their potential condition. They support the magnitude, frequency, timing, and duration of runoff within a natural range of variability and the movement of water and sediment from the surrounding uplands through the channel system sustains the health and function of the channel and riparian corridors as measured by the Watershed Condition Framework, National Riparian Core Protocol (Merritt et al. 2017) or another equivalent method.*
- *WAT-MA-01: Work with forest leadership and partners to identify priority watersheds, develop watershed restoration action plans as well as other restoration activities to leverage resources, and to implement and monitor projects that improve vegetative composition, reduce erosion, and/or otherwise improve watershed function.*

The draft plan (p. 105) and final plan (p. 106) guides all interested parties to the priority watersheds at the time both the draft and final plan were released. The plan discloses that priority watersheds are constantly changing and will change over the life of the plan. The forest disclosed in both the draft plan (page 105) and final plan (page 106) that priority watersheds were determined through the Watershed Condition Framework process. A hyperlink was provided in both documents which showed which watersheds were selected as priority, at the time each document was released.

The 2018 Farm Bill (16 USC 6543(b)), which was signed after the Watershed Condition framework was implemented in 2011, directs the plan to coordinate with interested partners and groups when developing priority watersheds as well as to develop watershed protection and restoration plans for those watersheds. The 2018 Farm Bill does not direct, during plan implementation, that priority watersheds be redefined; rather, the new plan provides the roadmap to implementing the direction in the 2018 Farm Bill.

To address response comments, the forest updated the wording of WAT-MA-01 in the draft plan to the final plan from "Work with partners to leverage resources and implement and monitor projects that

improve vegetative composition, reduce erosion, and/or otherwise improve watershed function" to "Work with forest leadership and partners to identify priority watersheds, develop watershed restoration action plans as well as other restoration activities to leverage resources, and to implement and monitor projects that improve vegetative composition, reduce erosion, and/or otherwise improve watershed function."

The changes between draft and final plan focused on working with forest leadership in an interdisciplinary team structure, identifying priority watersheds, and developing watershed restoration action plans. This change is consistent with FSH 1909.12, chapter 20, section 22.31, which states that the identification of priority watersheds for the plan will use an interdisciplinary team process, where the responsible official approves the priority watersheds. The responsible official should reach out to local, state, tribal, other federal agencies, and interest groups "partners" when identifying priority watersheds.

The forest disclosed in its response to comments (final EIS, volume 3, pp. 307-308, comment 2925-75) that the revised plan is a programmatic document that provides the framework to accomplish exactly what the objector refers to by collaborating with state, tribal, other federal agencies, and interest groups when identifying priority watersheds.

Conclusion

I find that the forest disclosed, in the plan, that priority watersheds were selected using the Watershed Condition Framework process, which meets the requirement of the planning rule at 36 CFR 219.7(f)(1). I also find that the forest developed plan components to address conditions in priority watersheds as directed in FSH 1909.12, chapter 20, section 22.31. The requirements at 16 USC 6543 cited by the objector directs implementation of the Watershed Condition Framework, not plan development or content.

Instructions

None.

New Wells and Pipelines

Objection Summary

Freeport-McMoRan and Pinto Valley Mining Corporation assert that WAT-S-02 is not consistent with several laws, regulations, and policies. Specifically, they claim:

- WAT-S-02 inappropriately broadens the use of Southwestern Region's FSM 2500, chapter 2540 because it applies only to special use authorizations of groundwater management, not all new authorizations for wells and pipelines and surface flow impacts.
- Southwestern Region's FSM 2500, chapter 2540 does not require that the forest analyze groundwater and surface water as hydrologically connected, in reference to pages 318-320 of the response to comments (final EIS, volume 3).
- The forest does not acknowledge the foundational principle of Arizona water law: that groundwater and surface water are administered in a bifurcated manner.
- The forest fails to recognize that groundwater withdrawal outside of active management areas is regulated under the reasonable use doctrine and not arbitrary caveats in the Southwestern

Region policy. They state that the reasonable use doctrine allows extraction of groundwater for a beneficial use, even if there are adverse effects to nearby wells, as demonstrated in the 1953 Arizona court case Bristor v. Cheatham.

- It is not clear what "groundwater dependent ecosystems" means, notwithstanding the proposed definition in the plan (page 10).
- The forest does not explain how a water pipeline that crosses forest but originates off the forest relates to forest ecosystems.
- The standard is inconsistent with 36 CFR Part 228 and 36 CFR Part 251, which specify the terms and conditions that may be included in special use permits or plans of operations to minimize extensive damage to the environment to the extent practicable, rather than prohibiting any adverse impacts.
- WAT-S-02 is derived from the Forest Service's proposed groundwater directives.

Objectors' Proposed Remedies

Pinto Valley Mining Corporation

Revise WAT-S-02 to read as follows (deletions are noted with ~~strikethrough~~; additions are noted with *italics*):

> New authorizations *for special use authorizations* for wells and pipelines on National Forest system lands shall ~~only~~ be considered *consistent with applicable provisions of state water law and proponents should strive* ~~where~~ to demonstrate that water removed and/or transported by these facilities *will ensure the long-term protection of* ~~would not adversely impact~~ springs, wetlands, riparian areas, surface flows, and other groundwater dependent ecosystems on National Forest System Lands.

Freeport-McMoRan

Remove WAT-S-02 from the plan.

Assessment

The plan component referenced by the objector includes:

> *WAT-S-02: "New authorizations for wells and pipelines on National Forest System lands shall only be considered where the water removed and/or transported by these facilities would not adversely impact springs, wetlands, riparian areas, surface flows, and other groundwater dependent ecosystems on National Forest System lands.*

Use of the Southwestern Region's FSM 2500, chapter 2540

The objector believes that WAT-S-02 should only apply to special use authorizations of groundwater management, not all new authorizations for wells and pipelines and surface flow impacts. WAT-S-02 was developed in compliance with 36 CFR Part 228 and 36 CFR Part 251, related to locatable mining projects, specifies the terms and conditions that may be included in special use permits or mining plans of operations and "do not prohibit any adverse impact to the environment, but rather require damage be minimized, often "to the extent practicable,' or they require compliance with existing federal or state standards, which do not [absolutely prohibit] any adverse environmental impacts."

As noted by the objector, these regulations do not prohibit adverse impacts to the environment, but do require compliance with applicable laws, regulations, and policies for protection of the environment (e.g., 36 CFR 251.56(a)(1)(i)(C)).

Groundwater and surface water as hydrologically connected

The objector points out that the Southwestern Region's FSM 2500, chapter 2540 does not require that the forest analyze groundwater and surface water as hydrologically connected, in reference to pages 318-320 of the response to comments (final EIS, volume 3).

Proposed Directive on Groundwater Resource Management, Forest Service Manual 2560 (Federal Register, p. 25819) states:

> *In particular, paragraph 1 would require the Forest Service to assume that groundwater and surface water are hydrologically connected, unless demonstrated otherwise using site specific data. This assumption is consistent with scientific understanding of the role and importance of groundwater in the planet's hydrological cycle.*

The forest stated in response to comments (final EIS, volume 3) that "Any new development of wells or pipelines within National Forest System Lands would have to undergo a site-specific project level analysis, in compliance with all applicable laws, regulations, and policies, including the National Environmental Policy Act, as well as Arizona Department of Water Resource's process," (p. 313, comment 58-15 and 58-16).

Further, the forest stated (comment 2925-88, p. 109):

> *All projects and activities authorized by the Forest Service must be consistent with the land and resource management plan (forest plan). When a proposed project or activity is inconsistent with forest plan direction, one of three actions can be taken: the proposal can be modified such that the project or activity will be consistent; the proposal can be rejected; or the plan can be amended contemporaneously with the approval of the projects so that the project or activity is consistent with the plan as amended. For locatable mineral operations regulated under 36 CFR 228, Subpart A, rejection of a plan is not an available option, therefore minerals staff would work with the proponent to either modify the Forest Plan if necessary or modify the proposal if feasible. These same regulations at 36 CFR 228.5(a)3 do allow the Forest Service to require changes in or additions to the proposed plan to meet the requirements of the regulations.*

The forest's response reflects direction for groundwater resource management in the proposed *Proposed Directive on Groundwater Resource Management, Forest Service Manual 2560*. HThe forest is using the defition from the proposed directive, which was rescinded in 2015, to define *groundwater dependent ecosystems* in the land management plan.

Groundwater withdrawal outside of active management areas and pipelines and failure to recognize Arizona Water Law

40 CFR 1501 requires that all actions proposed on federal lands, as well as their connected actions (i.e., drilling a well off-forest that is connected with a pipeline that will be placed on forest) must be considered for analysis under NEPA.

As stated on page 2 of the plan, "Management of National Forest System lands is also guided and constrained by laws, regulations, policies, practices, and procedures that are in the Forest Service directive system." Therefore, the forest is required to recognize Arizona water law in project planning. In response to comments (final EIS, appendix 3, p. 315, comment 2816-73), should a minerals project be proposed outside of the forest, the forest has no jurisdiction to require NEPA. However, if a minerals

project proposes installing a pipe on the forest from a well that originates off forest, NEPA would be required, and a plan amendment may be needed to ensure 36 CFR Part 228 is followed.

Clarity of "groundwater dependent ecosystems"

The glossary in the final EIS defines “groundwater dependent ecosystem” as a “community of plants, animals, and other organisms whose extent and life processes depend on groundwater. Examples include many wetlands, groundwater-fed lakes and streams, cave and karst systems, aquifer systems, springs, and seeps,” (final EIS, volume 2, p. 268). However, it does not provide the origins of this definition.

Use of the Forest Service’s proposed groundwater directives

“Groundwater dependent ecosystems” is described on page 25819 of the 2014 *Proposed Directive on Groundwater Resource Management, Forest Service Manual 2560*. This directive was rescinded in 2015 (80 FR 35299). While aspects of WAT-S-02 are derived from the proposed groundwater directives, the regulations do not prevent the use of similar language in a standard.

Conclusion

I find that WAT-S-02 applies to the entire plan area, as defined in FSH 1909.12, chapter 20, section 22.1, whether there is mineral potential or not. The forest defined groundwater dependent ecosystems in the glossary of the final EIS and in the final plan. However, the planning record does not describe where the definition comes from.

Pinto Valley Mining Corporation’s concern remains that the FSM 2560 was never finalized, therefore there is no basis for having a standard. The forest should review the planning record to ensure plan components are not dependent on this policy as opposed to reflective of the guidance.

Instructions

- Add a reference in the EIS and plan to explain the source of the definition of “groundwater dependent ecosystem”.
- Remove references to the rescinded FSM 2560 and reference current FSH or FSM definition and direction for groundwater dependent ecosystems. If this is not defined in the FSH or FSM, provide a definition from best available scientific information.

Restoration and Riparian Management Zone

Objection Summary

Freeport-McMoRan and Sierra Club et al. assert that RMZ-O-01 and RMZ-S-01 lack clarity. Freeport-McMoRan claims RMZ-O-01’s references to restoring habitat, riparian areas, and aquatic ecosystems is ambiguous and RMZ-S-01 does not provide clarity regarding who is responsible for the delineation and that these costs should not be imposed on the applicant. Sierra Club et al. states that RMZ-O-01’s target to complete restoration projects on at least 125 miles of streams every 10 years not sufficient or timely enough to improve riparian habitat on the forest.

Objectors’ Proposed Remedies

Freeport-McMoRan

Remove RMZ-O-01 and RMZ-S-01 from the plan.

Sierra Club et al.

Revise the plan to include a higher mileage of restoration to improve riparian habitat across the forest.

Assessment

The plan components referenced by the objector include:

- *RMZ-O-01: Complete active and passive restoration projects on at least 125 miles of streams every 10 years to improve the ecological integrity of perennial and intermittent riparian ecosystems rated as nonfunctioning and functioning-at-risk.*
- *RMZ-S-01: All projects in riparian areas shall identify and delineate the riparian management zone.*

Plan component references to restoring habitat, riparian areas, or aquatic ecosystems.

The forest (final EIS, volume 2, p. 276) defines ecological restoration as:

> *The process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. Ecological restoration focuses on reestablishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystems sustainability, resilience, and health under current and future conditions.*

Further, the forest explains how RMZ-O-01 would move riparian areas toward restoration (using both passive and active restoration techniques) on pages 409 and 410 of the final EIS (volume 1). It describes how the qualitative Proper Functioning Condition Riparian Assessment protocol was incorporated into the objective with the terms "nonfunctional" and "functional at risk" and illustrates the conditions and functioning of riparian areas. The objective also provides the ability to generate a "snapshot in time condition of the riparian area and describes how well physical processes are functioning," (p. 409). The final EIS notes that while other qualitative metrics could be used, the Proper Functioning Condition Riparian Assessment protocol is based on the best available science."

The forest used the best available scientific information to approximate the natural range of variation for key attributes of riparian resources. Volume I of the assessment described the best available scientific information for structure, composition, connectivity, and process for riparian and aquatic ecosystems on the forest.

Acre target of RMZ-O-01

The forest stated in the response to comments (final EIS, volume 3, p. 243, comment 2970-478) that per 36 CFR 219.1(g):

> *Plan objectives are designed to make progress toward attaining desired conditions and help set the basis for priority areas or activities. However, plan objectives must be attainable within the fiscal capability of the unit, determined through a trend analysis of the recent past budget obligations for the unit (3 to 5 years).*

It is also important to recognize that objectives were developed considering historic and expected budget allocations, as well as professional experience with implementing various resource programs and activities. It is possible that objectives could either exceed or not meet a target based upon a few factors, including budget and staffing increases or decreases, increased or decreased planning

efficiencies, and unanticipated resource constraints. A single project may meet multiple objectives (plan, p.12)

Delineation of riparian management zones

Starting on page 112, the plan describes how a riparian management zone will be developed during the life of the plan. As site-specific projects come about, the forest will delineate riparian management zones for the project area as well as develop site-specific design features that would protect the integrity of the resource. The forest, in response to comments, states that the riparian management zone is defined internally through project planning, and no cost would be incurred by outside entities (final EIS, volume 3, p. 246, comment 2816-80).

The forest would delineate the riparian management zones when site-specific projects are proposed. However, should projects be proposed that require cost recovery or other special use permit type work, then the entity proposing the work may pay for forest's resource specialist to delineate riparian management zones.

Conclusion

I find that in the EIS (volume 1, pp. 409-410) adequately defines what programmatic restoration is and provides rationale for why the progress metrics (125 miles and over ten years) were selected. The forest appropriately used best available scientific information to define riparian objectives and riparian management zones.

The forest adequately answered the objector's question about who would define riparian management zones and if there is the potential for outside entities to be responsible for their delineation and/or cost.

Instructions

None.

Framework for Riparian Health

Objection Summary

Sierra Club et al. asserts that the plan fails to prescribe a framework for integrated management of stressors to improve overall riparian health, which itself would require including measurable targets for riparian conditions.

Objectors' Proposed Remedies

- Prescribe a framework for integrated management of stressors to improve overall riparian health.
- Establish quantitative metrics to measure "progress toward … achievement" and specify desired conditions with respect to reference conditions.

Assessment

The plan components and monitoring questions referenced in this assessment include:

- *RERU-DC-07: Riparian areas provide functional soil and water resources, consistent with their flood regime and flood potential, and provide diverse habitats for native species. Riparian areas*

are in or trending toward proper functioning condition or other suitable scientific protocol or method.

- *RERU-DC-08: Invasive species (e.g., tamarisk, Russian olive, exotic forbs, and grasses) are not degrading ecological conditions. Invasive species are treated where site conditions can support native riparian plant communities.*
- *M-02: Are management actions effective in maintaining or improving watershed integrity in priority watersheds?*
- *M-03: How are stream conditions trending on the forest?*
- *M-04: Are management activities effective in maintaining or improving riparian and or spring ecosystems?*
- *M-05: Do grazing schedules allow sufficient time for riparian vegetation development and recovery following grazing?*
- *M-21: Are improvements for riparian areas being maintained to standard?*

The planning rule requires that the plan "include plan components, including standards or guidelines, to maintain or restore the ecological integrity of riparian areas in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity" (36 CFR 219.8(a)(3)). The plan contains direction for riparian areas (pp. 111-115). Page 113 also provides references to the *Watersheds and Water Resources*; *Riparian Ecological Response Units*; *Soils*; and *Lakes and Rivers Management Area* sections for additional applicable plan direction.

Further, the forest developed the plan holistically where "integrated resource management recognizes the interdependency of ecological, social, cultural, and economic resources and how management of one resource can influence the management or condition of other resources" (land management plan, p. 17). The plan also states that planners and the decision maker should consider the entire plan when managing for desired conditions, instead of just one resource's plan components (p. 17).

The monitoring chapter of the plan provides an outline for monitoring movement towards desired conditions over the life of the plan. The monitoring plan contains monitoring questions that consider the sustainability of riparian systems and efficacy of reduction of stressors on these systems. One objective of plan monitoring is to enable the responsible official to determine if a change in plan components or other plan content applicable to the plan area may be needed (FSH 1909.12, chapter 30, section 30.2). Monitoring questions M-02, M-03, M-04, M-05, M-21 are related to streams/riparian areas. These questions will inform a review of if the plan's standards and guidelines are moving riparian resources towards desired conditions, such as RERU-DC-07 and RERU-DC-08.

The monitoring chapter of the plan also indicates that "a plan monitoring implementation guide may be developed after the revised plan goes into effect to describe the 'how' in terms of specific approaches or strategies for measuring and analyzing plan monitoring indicator variables, models to be used, and appropriate target thresholds/benchmarks to be met to address the plan monitoring questions" (p. 165). The development of this guide is consistent with FSH 1909.12, chapter 30, section 31, which states that a separate monitoring guide may be developed to "set out methods for data collection, how the data is stored, responsibilities for managing monitoring information, and the schedule of monitoring and evaluation activities during the planning period," (p. 4).

The monitoring plan could provide direction to collect trend data to better understand changes that occur, inform monitoring questions, and ultimately inform management actions. This could be especially helpful because of the variety of riparian ecological response units within the forest, including Arizona Alder-Willow, Arizona Walnut, Desert Willow, Fremont Cottonwood-Conifer, Fremont Cottonwood-Oak, Fremont Cottonwood/Shrub, Herbaceous, Narrowleaf Cottonwood/Shrub, Ponderosa Pine/Willow, and Sycamore-Fremont Cottonwood (land management plan, p. 99).

The objector also expressed concerns related to ambiguity on what "trending toward proper functioning condition" means. The forest defined proper functioning condition in the glossary of the final EIS as “a methodology for assessing the physical functioning of riparian and wetland areas. The term proper functioning condition is used to describe both the assessment process, and a defined, on-the-ground condition of a riparian-wetland area. In either case, proper functioning condition defines a minimum or starting point” (final EIS, volume 2, glossary). The proper function condition framework provides a checklist and supporting science to help rate the condition of riparian areas on the forest.

Conclusion

I find that the forest addressed requirements of the planning rule by incorporating plan components for riparian areas (36 CFR 219.8(a)(3)) and establishing monitoring questions that consider the effectiveness of these plan components at achieving desired conditions (36 CFR 219.5). The plan identifies monitoring questions and associated indicators as required by FSH 1909.12, chapter 30, section 31. When the monitoring implementation plan is developed the forest should provide direction to collect trend data to better understand changes that occur, inform monitoring questions, and ultimately inform management actions.

Lastly, the forest included an accurate definition of proper functioning condition in the glossary of the final EIS.

Instructions

None.

Groundwater Dependent Ecosystem

Objection Summary

Arizona Mining Association states that groundwater and surface water that are not connected should not be managed as one hydrologically connected system. Freeport-McMoRan identifies in the forest's response to prior submitted comments on the draft EIS on WAT-G-14 is insufficient, including the adjustment in the final plan to make this a guideline instead of a management approach. The objector further states that WAT-G-14 reflects a policy statement in the 2014 proposed groundwater directives that was not finalized.

The objectors allege in WAT-G-01 that the definition for groundwater dependent ecosystems is inaccurate because "it suggests that groundwater dependent ecosystems can include ephemeral streams", which is contrary to definitions used by the United States Geological Survey and the State of Arizona. The objector cites the United States Geological Survey National Water-Quality Assessment Project Glossary (Gilliom et al. 2013), ephemeral surface features defined as "[a] stream or part of a stream that flows only in direct response to precipitation or snowmelt") and Arizona Admin Code R18-

11-101(20) (ephemeral water defined as "a surface water that has a channel that is at all times above the water table and flows only in direct response to precipitation").

Freeport-McMoRan concludes that evaluations described in WAT-G-01 are inconsistent with existing laws and guidelines. The objector states that "improvements to existing groundwater wells should not trigger any analysis of adverse impacts to 'groundwater dependent ecosystems' or mitigation measures." Further, due to lack of clarify regarding the term, which the objector states could refer to all ecosystems, the guideline "could result in the denial of an authorization to improve an existing groundwater well and could create an undue burden on necessary and simple improvements, such as repairs, changes in well functions, or others." The objector refers to the forest's response to prior submitted comments on the draft EIS (final EIS, volume 3, p. 314, comment 2816-74), including the modification made to the guideline, and states that the response is insufficient.

Objectors' Proposed Remedies

Freeport-McMoRan:

- Remove WAT-G-14 from the plan.
- Remove the definition of "groundwater dependent ecosystems" and any reference to the term from the plan.
- Remove WAT-G-01 from the plan.

Arizona Mining Association:

- Clarify WAT-G-14 to state that it applies only where the surface water and groundwater systems at issue have been shown to be hydrologically connected.

Assessment

The plan components referenced by the objector include:

- *WAT-G-01: When existing groundwater wells on National Forest System lands are proposed for improvement that increase the amount of water pumped or deepen the well, adverse impacts to groundwater dependent ecosystems (e.g., wetlands, riparian areas, springs, streams, and fens) should be evaluated, and measures to eliminate, mitigate, or reduce impacts should be implemented.*
- *WAT-G-14: Groundwater and surface water on National Forest System lands should be managed as one hydrologically connected system.*

Per the response to comment, the forest changed the management approach to guideline WAT-G-14 because they wanted to ensure they were following direction from the proposed FSM 2560.03 and the Southwestern Region's FSM 2500, chapter 2540, section 2541.35, paragraph 3, in order to manage groundwater and surface water on National Forest System lands as a hydrologically connected system.

The proposed FSM 2560 states (p. 25819):

> *In particular, paragraph 1 would require the Forest Service to assume that groundwater and surface water are hydrologically connected, unless demonstrated otherwise using site-specific data. This assumption is consistent with scientific understanding of the role and importance of groundwater in the planet's hydrological cycle.*

This is consistent with the forest's definition of groundwater dependent ecosystems.

Page 10 of the plan cites WAT-G-01 as groundwater dependent ecosystems in the plan as “communities of plants and animals whose extent and life processes are dependent on access to or discharge of groundwater and can include springs, wetlands, and perennial, intermittent or ephemeral streams.” The EIS defines groundwater dependent ecosystems as “community of plants, animals, and other organisms whose extent and life processes depend on groundwater. Examples include many wetlands, groundwater-fed lakes and streams, cave and karst systems, aquifer systems, springs, and seeps” (final EIS, volume 2, p. 268). Neither of these definitions give a reference in the body text or footnote where the definition comes from in Forest Service policy or regulation.

The objector asserts that the definitions came from the proposed FSM 2560. Inded, both the definitions in WAT-G-01 and the requirement in WAT-G-14 for hydrologically connected appear to be drawn from definitions in the proposed FSM 2560.

Further, the objector takes issue with the additional evaluation described in WAT-G-01 and regards this as an unnecessary burden. All future site-specific projects (including those related to expanding existing wells related to mining) must follow forest plan direction and take a “hard look.” Guidelines are specifically written for flexibility and are defined in the planning rule as “a constraint on project and activity decision-making that allows for departure from its terms, so long as the purpose of the guideline is met,” (36 CFR 219.7(e)(1)(iv)). If a project does not meet plan direction, a plan amendment may be considered (36 CFR 219.13(a)).

Conclusion

I find that the definition and direction for groundwater dependent ecosystems is not referenced or consistent with current Forest Service regulation and policy for water resources. The forest used the proposed FSM 2560. The forest should clarify the language in these plan components to be consistent with the current FSM. However, the guideline WTR-G-01 is consistent with the planning rule.

Instructions

Remove references to the proposed FSM 2560 and reference the current FSH or FSM definition and direction for groundwater dependent ecosystems. If this is not defined in the FSH or FSM, provide a definition from best available scientific information.

Ground Water Analysis

Objection Summary

Sierra Club et al. claims that the plan and final EIS fail to disclose the effects of groundwater withdrawals that will occur as a result of plan components directing increased well drilling for livestock waters.

Objectors’ Proposed Remedies

- Revise the plan and final EIS to disclose the effects of well drilling for livestock waters.
- Include limits on drilling to protect water resources.

Assessment

The plan component referenced in this assessment includes:

> *WAT-S-02: New authorizations for wells and pipelines on National Forest System lands shall only be considered where the water removed and/or transported by these facilities would not adversely impact springs, wetlands, riparian areas, surface flows, and other groundwater dependent ecosystems on National Forest System lands.*

In review of both the final EIS and the plan, no statements exist calling for the forest to increase well drilling for livestock waters. Further, development of upland water facilities does not mean that new wells would be needed. Existing developed water sources could be redistributed to upland areas without development of new sources.

The final EIS is a programmatic NEPA analysis and does not include site-specific project analysis, as suggested by the objector, because the plan is directed under FSH 1909.12, chapter 20, section 22.1 to "guide the development of future projects and activities and are not commitments to act or final decisions approving projects and activities," (p. 33).

WAT-S-02 states that new authorizations for wells will not adversely impact springs, wetlands, riparian areas, surface flows, and other groundwater dependent ecosystems on National Forest System lands. Should site-specific projects related to drilling of wells for livestock and upland water sources be proposed during the life of the plan, WAT-S-02 would need to be followed to protect surface and groundwater resources, unless a plan amendment is warranted.

Conclusion

I find that it is unnecessary to require an analysis of groundwater withdrawals for livestock watering because the plan is programmatic in nature, rather than site-specific.

Instructions

None.

Water Flows

Objection Summary

Sierra Club et al. states that RMZ-G-01 is inadequate to protect water flows needed to maintain riparian habitat. The objector points to spring development, which they say typically causes water withdrawal and use offsite. The objector continues:

> *[T]he guideline places no constraint on total amount of water withdrawal as a percentage of pre-development flow, nor does it require that enough water be left behind to maintain the pre-development quantity and quality of riparian vegetation. This is a prescription for further impairment of riparian ecosystems and increasing stressors on the diversity and at-risk species the Forest Service is required to protect.*

Objectors' Proposed Remedies

- Revise RMZ-G-01 to specify a) allowable withdrawal in terms of a measure like percentage of pre-development flow, and/or b) allowable decreases in quality or quantity of pre-development riparian vegetation.

- Specify that mitigation should occur such that any spring development would not contribute to net loss of area or quality of the pertinent riparian ecological recovery units across the forest and would not contribute additional stressors to at-risk species.
- Revise the plan to prohibit any new spring development from diverting any amount of water from any spring.

Assessment

The plan component referenced by the objector includes:

> *RMZ-G-01: New spring developments and redeveloped springs (not including maintenance) should employ the strategies outlined in RMRS-GTR 40574 or the best available science associated with spring development (USDA Forest Service 2020).*

The planning rule requires plans to have plan components, including standards or guidelines, to maintain or restore water resources in the plan area, including lakes, streams, and wetlands; ground water; public water supplies; sole source aquifers; source water protection areas; and other sources of drinking water (including guidance to prevent or mitigate detrimental changes in quantity, quality, and availability) (36 CFR 219.8(a)(2)(iii) and (iv)). RMRS-GTR 405 (Gurrieri 2020), which is incorporated by reference as the best available scientific information, addresses spring development project planning as well as long-term sustainable management of springs. The objectives of spring development design are 1) to retain hydrologic conditions in the developed spring habitat that are similar to undeveloped reference habitats and 2) to create a system that is easy to install and maintain (Gurrieri 2020, p. ii). This is consistent with 36 CFR 219.8(a)(2)(iii) and (iv).

Additionally, the final EIS acknowledges the impact water withdrawals have on spring ecosystems, stating that “site-specific mitigations, best management practices, and maintenance requirements will be written into each permit along with periodic monitoring to protect riparian areas” (final EIS, volume 1, p. 404). This demonstrates that plan direction for water resources and riparian managements zones will be considered and implemented through permit administration and spring development.

Conclusion

I find the forest adequately addressed the management of streams in the plan, consistent with FSH 1909.12, which requires use of best available scientific information. RMZ-G-01 meets the needs of spring ecosystems on the forest. As the conditions and need of all springs differ, this plan recognizes their importance and suggest the management of springs are best done at the project level, using best available scientific information.

Instructions

None.

Water Rights

Objection Summary

Freeport-McMoRan states that references in WAT-O-05 to "apply[ing] for state-based water rights…" as a means of protecting "highly valued resources" are misleading, as the priority dates of these new uses would be junior to most water users with older claims. The objective is also likely to involve the forest in

ongoing water rights litigation. The objector notes this objective was included in the groundwater directives that the Forest Service proposed in 2014 and were not finalized.

Objector's Proposed Remedy

Remove WAT-O-5 from the plan.

Assessment

The plan component referenced by the objector includes:

> *WAT-O-05: Apply for state-based water rights for instream flow use for at least two streams threatened with dewatering, supporting highly valued resources (e.g., threatened or endangered species, species of conservation concern, river-based recreation) or containing unique qualities (e.g., a perennial stream in the Sonoran Desert) within each ten-year period.*

Response to comment 2816-72 (final EIS, volume 3, p. 307) states:

> *The Tonto National Forest complies with the Southwestern Region Forest Service Manual Chapter 2540, Water Uses and Development[8]. Although new state-based instream flow right claims would be junior to existing uses they would be protected from additional uses in the future. What was originally the Watershed and Water Resources Objective 06, but is now Objective 05, has been updated to read: "Apply for state-based water rights for instream flow use for at least two streams threatened with dewatering, supporting highly valued resources (e.g., threatened or endangered species, species of conservation concern, river-based recreation) or containing unique qualities (e.g., a perennial stream in the Sonoran Desert) within each ten-year period.*
>
> *[8] R3 Regional Supplement, No. 2500-2001-1 (effective date September 5, 2001).*

Southwestern Region's FSM 2500, chapter 2540, section 2541.03 supports WAT-O-05. The manual includes policy direction to "Include high priority non-consumptive stream flows and standing waters when determining National Forest water needs. Where State law allows, quantify and pursue State water rights for flows and standing waters not covered by the reservation doctrine," (p. 3).

The objector did not provide specific references to law, regulation, or policy to sufficiently illustrate and support their issue with the forest's response to comments about new state-based water rights being protected from additional future uses.

Conclusion

I find that WAT-O-05 is consistent with Southwestern Region's FSM 2500, chapter 2540, section 2541.03. While aspects of WAT-O-05 are derived from the proposed groundwater directives, the regulations do not prevent the use of similar language in a standard.

Instructions

None.

Riparian Area Protections from Livestock

Objection Summary

Sierra Club et al. and Jeffrey Burgess assert that the plan fails to adequately protect riparian areas from livestock grazing, and the forest otherwise violates NEPA by failing to take a "hard look" at the key issue of riparian restoration and how it is directly impeded by authorized and unauthorized grazing activities.

Objectors' Proposed Remedies

Jeffrey Burgess

- Identify specific riparian utilization guidelines.
- Prohibit grazing in riparian areas recently damaged by floods.

Sierra Club et al.

- Revise the EIS to take a "hard look" at the impacts of grazing on riparian ecosystems and obligate wildlife, including a discussion of all connected and cumulative actions and concurrent restoration efforts.
- Revise the plan to remove all cattle from all riparian areas, per alternative C.

Assessment

The plan components referenced in this assessment include:

- *RMZ-G-03: In riparian management zones, projects and management activities should be designed and implemented to maintain or restore long-term natural streambank stability, native vegetation, floodplain, and soil function.*
- *RERU-G-02: Livestock management practices should allow riparian vegetation to recover. Plant development or recovery sufficient to sustain healthy riparian areas should occur following each livestock use period.*

The planning record demonstrates that livestock grazing in riparian areas is a concern on the forest and that many riparian areas are at risk, with livestock grazing as a contributing factor (final EIS, volume 2, p. 19). Numerous statements in the record demonstrate that livestock grazing can negatively affect ecosystem integrity. For example, volume 1 of the final EIS states that "Many of the early accounts of the vegetative communities indicate early overgrazing substantially altered the composition of the plant communities now present" (final EIS, volume 1, p. 142).

The forest's need to change assessment documents that "there is a need for standards and guidelines that minimize ecological impacts of multiple uses in riparian area" (p. 11). The record also shows that most riparian areas are impaired or unstable (final EIS, volume 1, p. 400, table 90; forest plan assessment, volume I, p. 161, table 52). However, the forest does not clearly demonstrate how the plan components will improve conditions in riparian areas or maintain ecological integrity.

GRZ-S-01 directs that "Livestock use in, and around, riparian areas will be evaluated on an allotment-specific basis. Design elements (e.g., deferment, herding, and fencing) will be implemented where needed." This is consistent with FSH 2209.13, chapter 90, section 94.1 (p. 13), which states:

> *[Allotment management plans] contain the pertinent livestock management direction from the project-level NEPA-based decision (sec. 92.23, para. 2). [Allotment management plans] also*

refine direction in the project-level NEPA based decision deemed necessary by the authorized officer to implement that decision. [Allotment management plans] should be developed concurrently with the completion of the site-specific analysis and project-level decision.

FSH 1909.12, chapter 20, section 22.13 writes that standards "Are written clearly and without ambiguity so that consistency of a project or activity with a standard can be easily determined," (p. 39). It is not clear how the forest would clearly assess and demonstrate how consistency with the GRZ-S-01 would be accomplished through project planning. Further, the phrase "in, and around, riparian areas" is ambiguous.

It is also not clear how RMZ-G-03 and RERU-G-02 would be met. The response to comments (final EIS, volume 3, pp. 238-239, comment 2970-514 and 2970-635) suggests that the plan requires proper management of grazing and riparian resources, but the planning record does not demonstrate that conditions are improving or would improve through implementing plan direction. The record also does not document how practices will be different in the riparian areas that are currently unstable or impaired nor how the forest will determine how allotment management plans are consistent with the plan (final EIS, volume 1, p. 405).

The objectors are also concerned with an apparent lack of a "hard look" at riparian restoration. Part of taking a hard look is considering the best available scientific information in the analysis. The effects of grazing on riparian areas have been broadly studied and there is considerable science, both supportive and not supportive of grazing. For example, application of plan standards for riparian areas on unstable or impaired sites, would result in utilization less than or equal to 35 percent. However, if riparian areas are stable or unimpaired, utilization could be as high as 60 percent (Holechek et al. 1999). This type of response is suggested by the guidelines but there is no citation of best available scientific information for use in riparian areas.

Another part of taking a hard look is providing a thorough analysis. While the analysis considered environmental and social effects of the plan components following the appropriate NEPA regulations and policy (36 CFR 220, FSM 1950, and FSH 1909.15), it could have included additional citations that explore the potential negative effects of grazing on riparian areas and what managers can do if they are in poor conditions. The final EIS includes a discussion of the application of conservative grazing of riparian areas, but it does not define the general criteria for when those should apply (final EIS, volume 1, p. 405).

Conclusion

I find that while the plan does provide desired conditions, it does not clearly provide sideboards for grazing in riparian areas. The analysis in the final EIS does not clearly articulate how plan components will maintain or improve existing grazing and riparian conditions to meet the goal of ecosystem integrity (36 CFR 219.9(a)). I also did not find a description of the affected environment and trends as a result of previous management actions, or a discusssion of potential grazing impacts.

Instructions

- Include descriptions of how monitoring of grazing effects in riparian areas is conducted and used to adjust management and ensure progress toward desired conditions.

- Clarify that allotment management plans are the appropriate management tool to direct site-specific management and how the adaptive management actions described in those plans are used to avoid grazing impacts.

"Herbivory" Versus "Livestock Grazing"

Objection Summary

Freeport-McMoRan replacing the term "herbivory" with "livestock grazing" to RMZ-DC-04 between the draft and final plan may be interpreted as being prohibitive and inconsistent with the Multiple-Use Sustained-Yield Act (16 USC 528-531).

Objector's Proposed Remedy

Revert the refenced language in RMZ-DC-04 to what it was in the draft plan.

Assessment

The plan component referenced by the objector includes:

> *RMZ-DC-04: Livestock grazing does not impact the long-term health of riparian vegetation. Vigor and diversity maintains or moves riparian vegetation as represented by Terrestrial Ecological Unit Inventory site potential and other suitable references to low departure from desired conditions for riparian vegetation types.*

The objector suggests that the "modification to RMZ-DC-04 between the draft and final plan (i.e., replacing the term "herbivory" with "livestock grazing") may be interpreted as being prohibitive and inconsistent with the Multiple Use Sustained Yield Act". The act (16 USC 528-531) requires that national forests "be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." It also states that "in the administration of the national forests due consideration shall be given to the relative values of the various resources in particular areas." The forest plan provides forest wide plan direction and resource specific direction, which includes plan components that allow for the ecological, social, cultural, and economic sustainability and multiple use direction as established through the Multiple-Use Sustained-Yield Act.

RMZ-DC-04 provides a desired condition for riparian areas on the forest. Desired conditions are "a description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed" (36 CFR 219.7(e)(1)(i)). Desired conditions themselves do not direct specific action or prohibit acting, rather they "describe the aspirations or visions of what the plan area (or portions thereof) should look like in the future and drive the development of the other plan components," (FSH 1909.12, chapter 20, section 22.11, p. 36).

Conclusion

I find that RMZ-DC-04 does not prohibit activities and it is consistent with the planning rule (36 CFR 219.10(a) and 36 CFR 219.8(a)(3)) and the Multiple-Use Sustained-Yield Act (16 USC 528-531).

While this plan component changed between draft and final, the modification is not expected to substantially change the management direction provided in the draft plan (40 CFR 1502.9(d)(4)).

However, the planning record does not appear to specifically address this change identified by the objector.

Instructions

Provide documentation in the planning record as to why the change was made from herbivory to livestock grazing in RMZ-DC-04. Documentation should include the reason for the change (e.g., new circumstances, new information, response to public comments) and should state whether the changes, new circumstances, or new information relevant to environmental concerns is or is not significant.

WAT-G-13 and WAT-DC-01

Objection Summary

Pinto Valley Mining Corporation states that the forest has not followed through on commitments it made to include language in the plan that was indicated in response to Pinto Valley Mining Corporation's comments on the draft EIS regarding WAT-DC-01 and WAT-G-13.

Objector's Proposed Remedy

Revise the plan to include language from the forest's response to Pinto Valley Mining Corporation's comments regarding WAT-G-13 and WAT-DC-01.

Assessment

The plan components referenced by the objector include:

- *WAT-DC-1: Watersheds support multiple uses (e.g., timber, recreation, grazing, cultural) with no long-term decline in ecological conditions as measured by the Watershed Condition Framework or an equivalent method and provide high-quality water for downstream communities dependent on them.*
- *WAT-G-13: Where Forest Service management contributes to designation of a water body as impaired, the Forest Service should implement recommendations in Total Maximum Daily Load (TMDL) assessments and, where feasible, complete watershed improvement projects in impaired or non-attaining water bodies without completed TMDL assessments.*

The forest responded to comments (final EIS, volume 3, p. 321, comment 2925-00). on WAT-DC-1 that:

> *We have incorporated the commentor's suggestion to include mining in the examples of the mentioned desired condition (revised forest plan, chapter 2, Watershed and Water Resources). However, we will not incorporate the suggestion to omit how we would measure and monitor the multiple uses as the statements enumerated by congress regarding the Watershed Condition Framework because it does not limit or prohibit the use of the Watershed Condition Framework as a way to monitor ecological conditions of multiple uses on National Forest System lands. As science and literature would develop as well, and that this is a desired condition, if a more appropriate tool is found we would also incorporate it into the process of monitoring and measuring adverse impacts from multiple uses within watersheds.*

However, WAT-DC-01 in the final plan does not include the word "mining."

The forest responded to comments on WAT-G-13 (final EIS, volume 3, pp. 320-321, comment 2925-00):

> *We have incorporated the commentor's suggestion to include "where feasible" into the forest plan's chapter 2, Watershed and Water Resources Guideline 13. The guideline will be revised as such [:] "Where Forest Service management contributes to designation of a water body an as impaired water body, recommendations in Total Maximum Daily Load (TMDL) assessments should be implemented to enable the Tonto to assist with meeting or exceeding water quality standards for the water body. Best management practices, watershed condition improvement treatments, or other identified water quality.*

Conclusion

I find that the forest did not add the word "mining" to WAT-DC-01 after they indicated they would in the response to comments.

WAT-G-13 in the final plan shows that the words "where feasible" were added to, but the exact wording that was proposed in the response to comments was not followed. In the updated WAT-G-13 in the final plan the forest states that they shall implement recommendations from total maximum daily load assessments as well as other impaired or non-attaining water bodies, where feasible.

Instructions

- Add "mining" to WAT-DC-01.
- Add rationale for why the forest modified WAT-G-13 to the planning record.

CONCLUSION

In closing, this is my response to objections filed to the final EIS, draft ROD, and revised land management plan for the Tonto National Forest. Where I find changes or additional information is needed, I am issuing instructions to the responsible official to implement before signing a final ROD. My response is the final decision of the United States Department of Agriculture on the objections. Thank you for your participation during this process and I look forward to engaging with you in the management of your national forests.

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Acts (e.g., the National Forest Management Act) are available at the Office of the Law Revision Counsel's United States Code website at https://uscode.house.gov/.

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