



United States Department of Agriculture

Apache-Sitgreaves National Forests Land Management Plan

Programmatic Final Environmental Impact Statement

Apache, Coconino, Greenlee, and Navajo Counties,
Arizona

Volume I. Chapters 1 through 3



Forest Service

Apache-Sitgreaves National Forests

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Programmatic Final Environmental Impact Statement for the Apache-Sitgreaves National Forests Land Management Plan

Volume I. Chapters 1 through 3

Apache, Coconino, Greenlee, and Navajo Counties, Arizona

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Abstract: To comply with the National Forest Management Act and address changes that have occurred over the past 27 years, the Apache-Sitgreaves National Forests propose to revise the current land management plan (1987 plan). This programmatic final environmental impact statement (FEIS) documents analysis of the impacts of four alternatives developed for programmatic management of the 2.1 million acres administered by the Apache-Sitgreaves National Forests.

The FEIS documents the analysis of all alternatives and the associated environmental consequences at a programmatic level. The preferred alternative (alternative B) analyzed in this FEIS and reflected in the accompanying “Apache-Sitgreaves National Forests Land Management Plan,” would guide all natural resource management activities on the Apache-Sitgreaves National Forests. This alternative addresses new information and concerns received since the 1987 plan was published, and it meets objectives of Federal laws, regulations, and policies.

Summary

The Forest Service proposes to implement a new land management plan for the Apache-Sitgreaves National Forests (Apache-Sitgreaves NFs or the forests). The area affected by the proposal includes the approximately 2.1 million acres of National Forest System (NFS) lands known as the Apache-Sitgreaves NFs, located in Apache, Coconino, Greenlee, and Navajo Counties in Arizona. This proposal does not include Apache National Forest lands located in New Mexico; those lands are managed according to the Gila National Forest land management plan.

This action is needed because the National Forest Management Act of 1976 directs that land management plans be revised every 10 to 15 years; the current management direction for the forests under the 1987 Apache-Sitgreaves NFs plan (1987 plan) is 27 years old. It no longer addresses changes that have occurred to economic, social, and ecological conditions; new policies and priorities; and new information based on monitoring and scientific research. For example, invasive species are a current threat to forest health; they currently infest over 30,000 acres of the Apache-Sitgreaves NFs. At the time the 1987 plan was approved, invasive species were not a concern.

Extensive public involvement and collaboration on the revision of the 1987 plan preceded publication of this FEIS. Informal discussions with the public regarding needed changes to the 1987 plan began with a series of public meetings during the summer of 2006. From 2006 to 2014, multiple meetings, correspondence, news releases, comment periods, and other tools were utilized to gather feedback from the public, forest employees, tribes, Federal and State agencies, and local governments. As a culmination of these public involvement efforts, the forests have developed this programmatic final environmental impact statement (FEIS) to examine potential alternatives for a new land management plan.

This FEIS provides detailed descriptions of each alternative and discloses the potential environmental consequences related to implementation. The four alternatives are

- Alternative A is the no action alternative and represents the 1987 plan, as amended. This alternative would continue to guide management of the Apache-Sitgreaves NFs. Alternative A emphasizes timber management as a primary tool for providing forest products for local and regional industrial and individual needs while meeting wildlife habitat needs.
- Alternative B is the proposed action (proposed plan) and the preferred alternative. This alternative was designed to address the need for change by addressing the demands for wildlife habitat, community protection, commodity outputs, and recreation opportunities with an emphasis on ecological restoration.
- Alternative C responds to public comments that forest management should provide increased benefits to local communities through management emphasis on commodity outputs and motorized and developed recreation. There is an emphasis on contributing to local and regional economic sustainability through ecological restoration
- Alternative D responds to public comments that forest management should emphasize more natural processes and nonmotorized and dispersed recreation opportunities. There is an emphasis on ecological restoration across all vegetation types.

The Notice of Availability announcing the release of the proposed plan and draft environmental impact statement was published in the Federal Register on February 15, 2013, which initiated a 90-day public comment period. In late February 2013, additional public meetings were held in

Summary

Show Low, Springerville, and Duncan (Clifton). Over 41,000 comment letters were received from individuals, organizations, agencies, and one tribe. These comments led to minor changes throughout the plan and environmental impact statement, all of which were within the scope of the analysis in the draft environmental impact statement.

The regional forester for the Southwestern Region will make the final decision on the selected alternative for the new land management plan.

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Commonly Used Acronyms

ADA – Arizona Department of Agriculture

ADEQ – Arizona Department of Environmental Quality

ADOT – Arizona Department of Transportation

AMS – Analysis of the Management Situation

AZGFD – Arizona Game and Fish Department

ASQ – Allowable Sale Quantity

BAER – Burned Area Emergency Response

BLM – Bureau of Land Management

BMP – Best Management Practice

CCF – 100 cubic feet

CER – Comprehensive Evaluation Report

CFR – Code of Federal Regulations

CWPP – Community Wildfire Protection Plan

CWRF – Cottonwood-Willow Riparian Forest

DBH – Diameter at Breast Height

DMCF – Dry Mixed Conifer Forest

DRC – Diameter at Root Collar

EI – Ecological Indicator

EIS – Environmental Impact Statement

EPA – Environmental Protection Agency

EO – Executive Order

ESA – Endangered Species Act

FR – Federal Register

FSH – Forest Service Handbook

FSM – Forest Service Manual

GBG – Great Basin Grassland

GIS – Geographical Information System

GTR – General Technical Report

HUC – Hydrologic Unit Code

IC – Interior Chaparral

IRA – Inventoried Roadless Area

MBDRF – Mixed Broadleaf Deciduous Riparian Forest

MIS – Management Indicator Species

MOU – Memorandum of Understanding

MPOW – Madrean Pine-Oak Woodland

MSO – Mexican Spotted Owl

MSG – Montane/Subalpine Grasslands

MVUM – Motor Vehicle Use Map

MWRF – Montane Willow Riparian Forest

NEPA – National Environmental Policy Act

NF – National Forest

NFMA – National Forest Management Act

NFS – National Forest System

NOA – Notice of Availability

NOI – Notice of Intent

NPS – National Park Service

NRCS – Natural Resource Conservation Service

NRHP – National Register of Historic Places

NRT – National Recreation Trail

Commonly Used Acronyms

NVUM – National Visitor Use Monitoring

OHV – Off-highway Vehicle

PAC – Protected Activity Center

PFA – Post-fledging Family Area

PFC – Proper Functioning Condition

PJW – Piñon-Juniper Woodland

PNVT – Potential Natural Vegetation Type

PPF – Ponderosa Pine Forest

RMRS – Rocky Mountain Research Station

RNA – Research Natural Area

ROS – Recreation Opportunity Spectrum

SAD – Sudden Aspen Decline

SDG – Semi-Desert Grassland

SFF – Spruce-Fir Forest

TCP – Traditional Cultural Property

TES – Terrestrial Ecosystem Survey

USC – United States Code

USDA – United States Department of
Agriculture

USFS – United States Forest Service

USFWS – United States Fish and Wildlife
Service

WCRA – Wetland Cienega Riparian Areas

WMCF – Wet Mixed Conifer Forest

WQA – Wildlife Quiet Area

WUI – Wildland-urban Interface

Chapter 1. Purpose and Need for Change

Document Structure

The Forest Service has prepared this programmatic final environmental impact statement (FEIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This FEIS discloses the environmental consequences that would result from the proposed action and alternatives. The document is organized into four chapters plus an appendix (consisting of multiple parts) and index:

- **Chapter 1. Purpose and Need for Change:** This chapter includes information on the purpose and need for changing the 1987 Apache-Sitgreaves National Forests Plan (1987 plan) and the Agency's proposal for achieving that purpose and need. This section also details the scope of analysis, how the Forest Service informed the public of the proposed action (proposed plan), and how the public responded.
- **Chapter 2. Alternatives, Including the Proposed Action:** This chapter provides a more detailed description of the Agency's proposed plan as well as alternative methods for achieving the stated purpose. The alternatives were developed based on issues raised by the public. Finally, this section includes a summary table of the environmental consequences associated with each alternative.
- **Chapter 3. Affected Environment and Environmental Consequences:** This chapter describes the affected environment (current condition) for each resource. It also describes the environmental consequences (effects) of implementing each alternative. This analysis is organized by resource area.
- **Chapter 4. Consultation and Coordination:** This chapter provides a list of preparers and agencies consulted during the development of the environmental impact statement.
- **Appendix:** The appendix consists of multiple parts and provides more detailed information to support the analyses presented in the environmental impact statement such as the public comments and responses and a description of analysis process.
- **Index:** The index provides page numbers by topic.

Additional documentation, including more detailed analyses of resources, may be found in the project record (the "Plan Set of Documents") located in the supervisor's office.

Introduction

The 2.1 million acre¹ Apache-Sitgreaves National Forests (Apache-Sitgreaves NFs or the forests) are managed as a single administrative unit and are located in east-central Arizona. The Apache-Sitgreaves NFs are managed by the Forest Service, an agency of the U.S. Department of Agriculture (USDA). The forests are currently being managed under the 1987 plan. The Apache-Sitgreaves NFs are proposing to revise the 1987 plan. The Apache-Sitgreaves NFs are situated in Apache, Coconino, Greenlee, and Navajo Counties. Ranger district offices are located in Alpine, Clifton, Pinetop-Lakeside, Overgaard, and Springerville. The supervisor's office is located in Springerville (figure 1).

¹ In addition, approximately 650,000 acres of the Apache National Forest are located in New Mexico. The Gila National Forest administers and manages these lands according to the Gila National Forest land management plan. They are not included in this analysis.

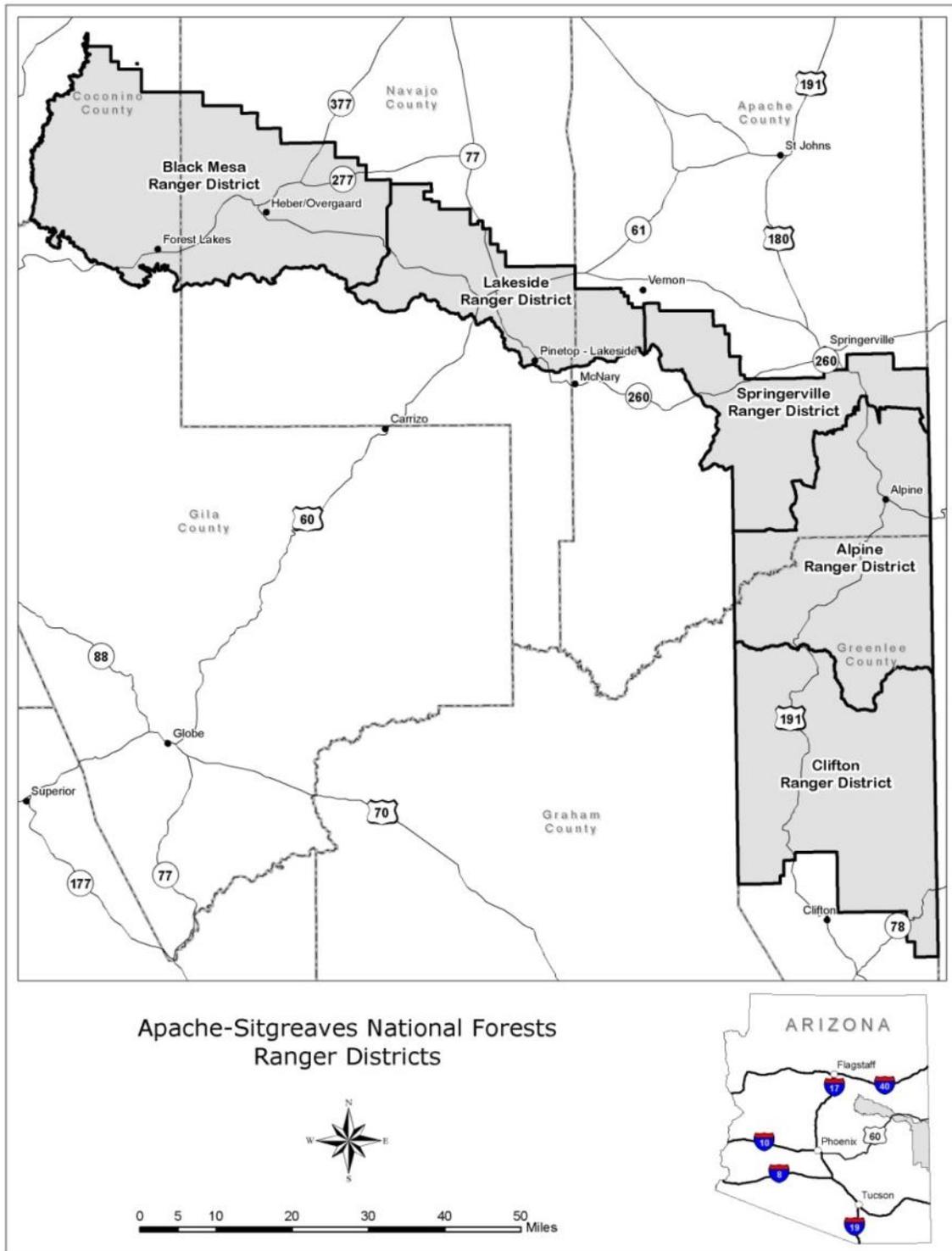


Figure 1. Map of ranger districts on the Apache-Sitgreaves NFs

Purpose and Need for Change

The purpose of this FEIS is to evaluate different programmatic strategies (or alternatives) for revising the existing land management plan (1987 plan) and disclose the potential environmental consequences of these alternatives. The purpose of a land management plan is to provide guidance for managing the forests' resources in a manner that maintains or moves toward desired conditions.

The 1987 plan was approved in August 1987 and has been amended 15 times. The intent of the 1987 plan was to guide forest management for 10 to 15 years. However, after 27 years, it no longer addresses changes that have occurred to economic, social, and ecological conditions; new policies and priorities; and new information based on monitoring and scientific research.

Using extensive public and employee collaboration and the "Analysis of the Management Situation"² the Apache-Sitgreaves NFs identified several needs for change in the 1987 plan. The needs for change are summarized below in three revision topics: (1) Maintenance and Improvement of Ecosystem Health, (2) Managed Recreation, and (3) Community-Forest Interaction.

There is a need to revise the 1987 plan to (1) guide natural resource management activities on the forests for the next 10 to 15 years, (2) address public issues and the need for change as summarized in the three revision topics, and (3) meet the legal direction of the National Forest Management Act (NFMA) of 1976 and the provisions of the 1982 Planning Rule³ to revise the plan every 10 to 15 years.

Revision Topic 1: Maintenance and Improvement of Ecosystem Health

Conditions have changed since the 1987 plan was issued. Vegetation conditions (e.g., vegetative structure, composition, function) are divergent from reference conditions. Forest conditions indicate a substantial departure from the natural fire regime. There are plant and animal species that need further consideration in the plan revision process. There are also emerging issues not addressed by the 1987 plan (e.g., invasive plants and animals, climate change).

Vegetation Conditions

Thirteen of the 14 potential natural vegetation types (PNVTs) on the Apache-Sitgreaves NFs vary (sometimes substantially) in structure, composition, function, and natural disturbance processes

² The "Analysis of the Management Situation" includes the "Comprehensive Evaluation Report" (Forest Service, 2008a), "Ecological Sustainability Report" (Forest Service, 2008e), "Economic and Social Sustainability Assessment" (Forest Service, 2009a), "Resource Evaluations" (Forest Service, 2008b), "CER Supplement to Meet AMS Requirements" (Forest Service, 2010a), and the "Wallow Fire Changed Condition Assessment" (Forest Service, 2012e). These documents analyzed and evaluated the need to change the 1987 plan and informed the development of the three revision topics.

³ The transition provision, 36 CFR § 219.17(b)(3), of the 2012 Planning Rule (77 FR 21162-21276) allows use of the provisions of the planning rule, commonly called the 1982 Planning Rule, to amend or revise plans.

from desired conditions⁴. These include ponderosa pine, dry mixed conifer, spruce-fir, and wet mixed conifer forests; piñon-juniper and Madrean pine-oak woodlands; Great Basin, semi-desert, and montane/subalpine grasslands; mixed broadleaf deciduous, montane willow, and cottonwood-willow riparian forests; and wetland/cienega riparian areas. Interior chaparral is the only PNVT that is at or close to desired conditions.

Ponderosa pine and dry mixed conifer forested PNVTS are generally composed of dense groups of too many young, small trees prone to stand-replacing crown fires and insect and disease infestations. The desired condition is to have more open forests containing a variety of ages and sizes of trees. Surface fire would play an active role in maintaining desired conditions.

Spruce-fir and wet mixed conifer forested PNVTS generally have too many young and small trees, and have been impacted by insects and disease resulting in standing dead trees. These dead trees contribute to higher intensity wildfire. The desired condition is to have a closed canopy forest with more mature and large trees where stand-replacing fires occur infrequently.

The presence of aspen in several PNVTS is declining because of insects, disease, overbrowsing by wildlife and livestock, absence of natural fire, and unnaturally dense stands of conifers that shade out and inhibit aspen growth. The desired condition is to have a sustainable amount of aspen on the forests because aspen stands have scenic values and provide wildlife habitat.

The Madrean pine-oak woodland PNVT has too many young and mid-aged trees grouped closer together than the desired condition of medium to large trees with open canopy. The piñon-juniper woodland PNVT is fairly close to the desired condition, although some areas have too many big trees spaced close together and lack some grass and forb species. Within these woodlands, there are also areas with little ground cover contributing to unsatisfactory soil conditions and increased erosion and sedimentation.

Riparian areas are a focal point for use by humans, wildlife, and livestock. Over time, these stressors have caused changes in the riparian vegetation. The desired condition is to have more mature trees and saplings and the variety of species appropriate in these areas. Riparian areas are important because water is limited in the region. Although riparian areas cover less than 3 percent of the Apache-Sitgreaves NFs, the forests contribute the major portion of these riparian PNVTS within the greater ecoregion (which extends beyond the forests' boundaries).

The three grassland PNVTS have experienced dramatic changes over time, including encroachment by trees and shrubs, loss of perennial grass cover, and spread of nonnative species. Many areas of the forests that appear to be piñon-juniper woodlands are actually encroached grasslands. The desired condition is to have grasslands with less than 10 percent of the area in woody species canopy and with the appropriate species composition. Healthy grasslands are important habitat for a variety of wildlife species and are essential for maintaining pronghorn antelope populations. Healthy grasslands also contribute to the availability of rangelands for livestock grazing.

All 14 PNVTS are key components in sustaining terrestrial and aquatic ecosystems and providing goods and services (e.g., water resources, recreation settings, wood products, rangelands,

⁴ In some vegetation types, desired conditions are the same as reference conditions; see the "Vegetation" section in chapter 3 for more information.

medicinal plants). Unhealthy vegetation conditions threaten the viability of plants and animals and the forests' ability to provide a sustained flow of goods and services. They also contribute to the occurrence of uncharacteristic wildfire which may, in turn, threaten towns and communities adjacent to the Apache-Sitgreaves NFs.

There is a need to describe the desired composition, structure, cover, and fire regime of the 14 PNVTs that would result in resilient, functioning ecosystems. In addition, there is a need to guide future vegetation management activities, including wildland fire and mechanical treatments, to maintain or move toward desired conditions.

Wildlife and Fish Habitat

The provisions of the 1982 Planning Rule require habitat be managed to maintain viable populations of existing native and desired nonnative vertebrate and plant species in the planning area. The Endangered Species Act requires Federal agencies to conserve and recover endangered and threatened species and their habitats. There are currently 18 animal and fish species listed or proposed for listing as threatened and endangered. Thirteen of these species have designated or proposed critical habitat located on the Apache-Sitgreaves NFs. There is a need to incorporate management direction to guide future projects to maintain species diversity and viability across the planning area. In addition, there is a need to reevaluate and update the management indicator species (MIS).

Soil and Water

All watersheds have some areas with unsatisfactory soil condition and streams with reduced water quality. The soil condition rating is unsatisfactory or impaired on more than 30 percent of the forests, compared to the reference conditions of less than 5 percent. Water diversions and impoundments, unnaturally dense forests, grazing, and prolonged drought have altered streamflow, water availability, and riparian conditions. There is a continuing need to improve soil and riparian conditions, prevent water quality deterioration, and acquire or maintain instream flow. Soil and water protection is mandated by law (e.g., National Forest Management Act, Clean Water Act) and Forest Service policy.

Invasive Species

Invasive species are a growing threat to native species, ecosystem function, and the quantity of forest goods and services. Invasive plants (e.g., mullein, tamarisk, yellow starthistle) currently infest at least 30,000 acres across the Apache-Sitgreaves NFs. Invasive animals (e.g., crayfish, bullfrogs) prey on and outcompete native species and degrade habitats many native species depend on. There is a need to provide direction to control, treat, and eradicate invasive plant and animal species.

Revision Topic 2 - Managed Recreation

There are several concerns related to recreation not adequately addressed in the 1987 plan. These include more people recreating on the forests and the changing demographics of forest users. There are special areas (e.g., scenic byways) not mentioned in the 1987 plan, including the 25 rivers that are eligible or suitable for the National Wild and Scenic Rivers System. There may be

NFS lands that could be recommended to Congress for designation into the National Wilderness Preservation System.

Recreation Opportunities

There is an increased demand for the number and type of recreation opportunities on the Apache-Sitgreaves NFs.

More people use the Apache-Sitgreaves NFs for outdoor recreation than for any other purpose. Activities include relaxing and escaping the heat, fishing, hiking, off-highway vehicle (OHV) use, viewing natural features and wildlife, camping, driving for pleasure, picnicking, large group gatherings, and hunting.

State highway improvements provide easier access to the forests from Arizona's major metropolitan areas, increasing the number of visitors and demand for recreation. In addition, the demographics of the recreating public are changing. An aging and urban population and increased ethnic diversity contribute to a demand for varied recreation opportunities. Forest managers face major challenges in maintaining and developing quality recreation opportunities and a safe transportation system, while providing for resource protection.

There is a need to update the spectrum of recreation opportunities to reflect current and projected recreation needs, natural resource impacts, and public input. This includes identification of areas that are developed for high use and areas that resemble more natural landscapes. There is also a need to identify the suitability of areas for motorized vehicle use and other recreational activities.

Recommended Wilderness

As required by the provisions of the 1982 Planning Rule, all Apache-Sitgreaves NFs lands were evaluated for wilderness character. Thirty-eight areas (totaling approximately 700,000 acres) were identified as potential wilderness which could be recommended to Congress for designation.

There is a need to recommend areas, if determined appropriate by the responsible official, to Congress for wilderness designation and to provide interim management guidance.

Eligible and Suitable Wild and Scenic Rivers

There are 25 rivers with a combined 378 river miles eligible or suitable for inclusion into the National Wild and Scenic Rivers System. The 1987 plan provides direction for only three of these rivers. Although current Agency policy (Forest Service Handbook 1909.12 Interim Management of Eligible or Suitable Rivers) provides guidance to protect the outstandingly remarkable values of these rivers, there is a need to provide direction for all 25 eligible or suitable wild and scenic rivers.

Recommended Research Natural Areas

Research natural areas (RNAs) are maintained in natural conditions insofar as possible to provide for research, observation, and study. There is a need across the Southwestern Region to designate RNAs which represent specific vegetative types (e.g., semi-desert grassland, montane willow and cottonwood-willow riparian forests, wetland/cienega riparian areas, aspen) and aquatic habitats. The Apache-Sitgreaves NFs have the opportunity to contribute to these needs by recommending

five eligible areas for RNA designation: Thomas Creek, Corduroy, Three Forks, Lower Campbell Blue, and Sandrock.

Other Special Areas

There are other existing special areas not recognized in the 1987 plan such as the Heber Wild Horse Territory, scenic byways, and national recreation trails. There is a need to provide management direction for these special areas.

Revision Topic 3 – Community-Forest Interaction

The Apache-Sitgreaves NFs are literally the backyard for many residents in the White Mountains region of Arizona. Many communities adjoin the forests, while others are completely surrounded. Because of this close proximity, many communities and private landowners may be affected by forest management decisions. These entities, in turn, may affect forest management.

There are several social concerns that have prompted a need to change the 1987 plan. Communities are at risk from uncharacteristic wildfire. There are increasing demands for goods, services, and forest access from growing populations and urban development that borders the forests. Many communities are surrounded by the forests and can be affected by adjustment to the forests' land ownership. Commodity use and forest product outputs have shown declines from the past. However, these forest outputs and associated uses contribute to sustaining the lifestyles and traditions of local communities. Energy resource demands also continue to grow.

Contribution to Local Communities

Although local communities have shifted from commodity-based economies to service-based economies, there are still local benefits associated with wood harvesting, grazing, and gathering of forest products.

There is a need to continue to provide a sustainable supply of forest and rangeland resources that is consistent with achieving desired conditions and supporting local communities. There is also a requirement (per the provisions of the 1982 Planning Rule) to determine the suitability of lands for timber production and the allowable sale quantity of timber.

Threat to Communities from Wildfire

Many nearby communities and portions of the Apache-Sitgreaves NFs are at increased risk from wildfires because vegetation conditions are divergent from desired conditions, including fuel loads at uncharacteristically high levels. The events surrounding the 2002 Rodeo-Chediski Fire and the 2011 Wallow Fire, the two largest fires in Arizona history, served as a catalyst for increased public concern. Following the Rodeo-Chediski Fire, communities developed community wildfire protection plans (CWPPs), which identify and prioritize treatment areas to reduce the wildfire hazard to communities. The 1987 plan does not recognize this increased threat from wildfire nor does it prioritize treatments to address the threat. There is a need to provide direction to address communities at risk from uncharacteristic wildfire, including describing the appropriate vegetation desired conditions and fire regime and treatment of the wildland-urban interface.

Urban Interface Demands

Many communities are completely surrounded by the Apache-Sitgreaves NFs and are limited in the ability to expand. In the past decade, there has been a major increase in development on land adjoining and/or surrounded by the forests. Demands related to this growth include access to the forests, utility corridors, roads, special use permits, and recreation opportunities. There is a need to provide updated guidance for addressing urban interface demands and land ownership adjustments.

New Energy Development

There are three existing high power energy corridors located on the Apache-Sitgreaves NFs. Two corridors traverse the west side of the forests, one containing a 500 kV transmission line and one containing 345 kV transmission lines. One 345 kV transmission line runs through a portion of the Clifton Ranger District in the southeastern portion of the forests. There may be a need for additional energy corridors or developments (e.g., electric transmission lines, pipelines, wind turbines) because of the expected increased demand for electricity to serve the growing populations of Arizona and the Southwest. There is a need to provide guidance for the existing energy corridors and criteria for establishing new energy corridors or developments which was not provided in the 1987 plan.

Proposed Land Management Plan

The Forest Service proposes to revise the 1987 plan for the Apache-Sitgreaves NFs. The proposal updates the desired conditions, objectives, standards, guidelines, special areas, suitability, and monitoring requirements that will guide management of the Apache-Sitgreaves NFs for the next 10 to 15 years. It also changes the description and allocation of the management areas to achieve forestwide desired conditions and to provide opportunities for a range of activities. The proposal addresses the need to change the 1987 plan related to the three revision topics listed above.

In response to the need for change, the regional forester of the Southwestern Region (the responsible official for this decision) and the Apache-Sitgreaves NFs have developed the “Apache-Sitgreaves National Forests Land Management Plan” (plan). The plan accompanies this document.

Decision Framework

The regional forester for the Southwestern Region will make the final decision on the selected alternative for the revised land management plan. The regional forester will review the proposed plan, the other alternatives, and the environmental consequences, then decide which plan alternative best achieves the desired conditions, multiple-use concept, diverse needs of people, and sustainable management of the Apache-Sitgreaves NFs as well as conforming to the direction of the National Forest Management Act (NFMA) and the Multiple Use–Sustained Yield Act (MUSYA).

Scope of the Analysis

The programmatic analysis in this FEIS is limited to the potential environmental consequences associated with the need for change and on issues derived through public comment received

throughout development of the proposed plan and its alternatives. Many topics are beyond the scope of the plan revision process and will not be considered in the FEIS. Projects implementing the land management plan will be analyzed in subsequent site-specific environmental documents. Project-level impacts are not disclosed in this document. For example, the designation of specific routes, trails, and areas for motorized vehicle travel will not be considered during the plan revision process but would be addressed in separate environmental analyses. Some topics (e.g., hunting regulations), although important, are beyond the authority or control of the Apache-Sitgreaves NFs and will not be considered. In addition, some topics, such as wild and scenic river suitability determinations, will not be undertaken at this time but would be addressed in the future in separate analyses.

Because the proposed plan and other alternatives involve potential environmental consequences that could occur over a broad geographic region and time horizon, the depth and detail of the impact analysis is fairly general, focusing on major impacts in a qualitative manner.

Land Management Plan Decisions

The Forest Service makes two types of management decisions for National Forest System (NFS) lands: programmatic (or broad) and project-level.

Programmatic decisions are made in the land management plan, and they are expressed as goals (identified as desired conditions), objectives, standards, guidelines, special areas, suitability, and monitoring. The land management plan provides a broad framework that guides project-level decisions but does not authorize, fund, or carry out any site-specific activities. Instead, the land management plan establishes limitations on what actions may be authorized and what conditions must be met during project-level decisionmaking.

Project-level decisions are made for site-specific activities such as constructing a new trail or conducting a prescribed burn. Project-level decisions must comply with NEPA procedures and be consistent with the land management plan.

Data collection, analysis, and public involvement are important to making management decisions; these steps guide development of the land management plan and the design of projects that implement the plan and culminate in the approval of project-level decisions. Monitoring and evaluation are also important to help inform future management decisions.

The primary decisions made in the land management plan include the following:

- Establishment of desired conditions and objectives that reflect the multiple-use concept central to the mission of the Forest Service;
- Establishment of standards and guidelines to apply to future activities;
- Identification of areas suitable or not suitable for various uses;
- Wilderness recommendations and other recommendations for special area designation; and
- Establishment of a monitoring and evaluation strategy.

Tribal Consultation

The Apache-Sitgreaves NFs have consulted with nine tribes and one chapter that use the forests for traditional, cultural, or spiritual activities. The following tribes and chapter were consulted: White Mountain Apache Tribe, San Carlos Apache Tribe, Hopi Nation, Navajo Nation, Pueblo of Zuni, Yavapai-Apache Tribe, Tonto Apache Tribe, Fort McDowell Yavapai Nation, Yavapai-Prescott Indian Tribe, and the Ramah Chapter of the Navajo Nation.

Tribes were initially informed about plan revision in October 2006, through a letter explaining the revision process and extending an open invitation to meet with the Apache-Sitgreaves NFs. A consultation letter was sent to the tribes in June 2009 asking for input on the working draft land management plan. In December 2009, the tribes were sent a letter that provided the revision status and upcoming publication of the notice of intent (NOI) and invited their comments and concerns. In May 2012, tribes were sent working drafts of the proposed land management plan and draft environmental impact statement (DEIS) for their review prior to releasing the documents to the public. In early February 2013, tribes were invited to review the published proposed plan and the DEIS. In addition to consultation, the tribes have been included in all public outreach efforts throughout the plan revision process.

Four tribes provided written responses: White Mountain Apache Tribe, Navajo Nation, Tonto Apache Tribe, and Yavapai-Prescott Indian Tribe. Consultation meetings were held with the San Carlos Apache Tribe (August and November 2006), White Mountain Apache Tribe (August 2006, March 2007, and April 2010), Navajo Nation (August 2006, September 2008, and December 2009), Hopi Tribe (August 2006 and November 2009), and Pueblo of Zuni (August 2006, September 2008, and July 2011).

Concerns identified by the tribes are discussed in the “American Indian Rights and Interests” section in chapter 3. Concerns include tribal access to the forests and protection of sacred and archaeological sites as traditional cultural properties (TCPs), water sources, and plants for subsistence and medicine. These concerns are addressed in the proposed plan.

Public Involvement

Extensive public involvement and collaboration on the revision of the 1987 plan preceded publication of this FEIS. The plan revision effort has been on the forests’ “Schedule of Proposed Actions” (SOPA) quarterly since 2008. Informal discussions with the public regarding needed changes to the 1987 plan began with a series of public meetings during the summer of 2006. From 2006 to 2014, multiple meetings, correspondence, news releases, comment periods, and other tools were utilized to gather feedback from the public, forest employees, Federal and State agencies, and local governments. Detailed information about the Apache-Sitgreaves NFs public involvement process can be found in appendix F and the public participation plan (Forest Service, 2014d) in the “Plan Set of Documents.”

The notice of intent (NOI) to revise the 1987 plan and prepare an environmental impact statement was published in the Federal Register (74 FR 68776-68779) on December 12, 2009. The NOI requested input on the need for change and proposed action, specifically if any substantive issues or concerns were missing. In March and April 2010, four public meetings and an informal comment period were held to gather feedback on the initial set of draft alternatives.

Prior to the release of the DEIS in February 2013, the forests had received over 4,000 comments since initial scoping in 2006. Some comments were eliminated from detailed study because they were (1) outside the scope of the proposed action, (2) already decided by law, regulation, or a higher level decision, (3) irrelevant to the decision to be made, or (4) conjectural and not supported by scientific or factual evidence. Other comments fell into the following categories: forest health and restoration, treatment methods, wildlife needs, recreation opportunities, wilderness resources, wild and scenic rivers, threats to communities from wildfire, contributions to local communities including availability of forest products and rangelands, land exchanges, and new energy corridors.

Comments received early in the public involvement process were used along with science-based evaluations (e.g., “Analysis of the Management Situation”) to draft the initial proposed plan. Comments received later in the process were used to modify the proposed plan, where appropriate. In situations where a modification of the proposed plan could not adequately address a comment, consideration was given as to whether the comment represented an unresolved conflict or issue that would require development of an alternative to the proposed plan.

The Notice of Availability announcing the release of the proposed plan and DEIS was published in the Federal Register (78 FR 11171) on February 15, 2013, which initiated a 90-day public comment period. Over 41,000 comment letters were received from individuals, organizations, agencies, and one tribe. These comments are summarized and responded to in appendix A. The comments led to minor changes throughout the plan and environmental impact statement, all of which were within the scope of the analysis in the draft environmental impact statement (see “Summary of Changes” section below).

Summary of Changes from the Proposed Plan and Draft Environmental Impact Statement

Changes made in the plan and FEIS were driven by specific comments from the public, employees, other government agencies, and tribes on the proposed plan and draft environmental impact statement (DEIS). Changes made to the plan include the following:

- Added a wildland fire management section to better describe management intent;
- Changed the recreation suitability for recommended wilderness; removed the suitability of mechanized use within recommended wilderness in alternatives B and C to provide consistent management direction with the adjoining wilderness;
- Removed direction to establish forage reserves; the direction was deemed not necessary;
- Modified vegetation herbaceous cover and composition desired conditions, standards, and guidelines to better clarify the intent and updated grass height desired conditions based on plant taxonomic descriptions;
- Changed livestock grazing suitability; removed the Black River Conservation Area from the table because the area is covered by the category “Current National Forest System land not in a grazing allotment”;
- Added to “Background” and “Management Approaches” sections to recognize other direction or management emphasis (e.g., feral horses, cave management, drought policy);
- Moved “Other Sources of Information” sections to Appendix D. Relevant Laws, Regulations, Policies, and Other Sources of Information;

- Clarified language throughout the plan, added an acronym list, and expanded the glossary;
- Updated tables and figures based on updates to information between the draft and final documents; and
- Made other relatively minor changes, including factual corrections.

Changes made to the FEIS include the following:

- Considered eight additional alternatives not analyzed in detail; these are disclosed in the “Alternatives Considered but Eliminated from Detailed Study” section in chapter 2;
- Updated effects determinations for threatened and endangered species to reflect the final biological assessment (Forest Service, 2014cc);
- Added appendix A which includes responses to public comments on the proposed plan and DEIS;
- Added appendix H which contains comment letters from government and tribal entities;
- Clarified language throughout the FEIS, added an acronym list, and expanded the glossary;
- Updated tables and figures based on updates to information between the draft and final documents; and
- Made other relatively minor changes, including factual corrections.

Issues that Served as the Basis for Alternative Development

The following items represent issues that resulted from unresolved conflicts during the iterative development of the proposed plan. These issues led to development of alternatives C and D (see chapter 2 for more information on alternative development).

- **Strategy for Restoring Vegetation:** Overall, during scoping, public comments supported the need to move toward desired conditions that are more healthy and resilient to anticipated future changes. However, opinions differed on what a “healthy” forest is, and the means to achieve it. For example, some people disagreed with the proposed plan vegetation treatment strategy and wanted to retain all old and large trees for wildlife habitat, while others felt it is important to remove more of these trees to contribute to the local wood industry. Also, some wanted the Forest Service to use more logging and thinning than what is identified in the proposed plan, while others desired an approach relying on natural processes such as wildland fire.
- **Amount of Wildlife Quiet Areas:** Habitat security and connectivity is important for maintaining species viability. The proposed plan identifies a management area (Wildlife Quiet Area Management Area) to provide for specific species needs. Some comments indicated a need for more or less areas with reduced disturbances to wildlife.
- **Type and Amount of Recreation Opportunities:** Public opinions are divided on the appropriate mix of different types of recreation settings and opportunities that should be provided. The proposed plan attempts to provide a balance of recreation opportunities. Some people wanted additional developed recreation facilities, while others wanted no new development and felt the Apache-Sitgreaves NFs should only maintain and improve existing recreation facilities. There were also conflicts over the amount of land that should be managed for motorized versus nonmotorized activities.

- **Amount of Wilderness:** There was a wide variety of opinions as to whether the Apache-Sitgreaves NFs need more wilderness. The proposed plan recommends additions to two existing wilderness areas. There were some people who desired no additional wilderness, while others wanted more. In addition, some people wanted the Blue Range Primitive Area designated as wilderness, and others wanted to remove the primitive area designation.
- **Availability of Wood Products:** There are varying opinions about how much commodity-type activities should occur on the Apache-Sitgreaves NFs. The proposed plan would make a variety of wood products (e.g., logs, biomass, firewood) available for personal and industrial use. Some people wanted the forests to make more wood products available, and other people wanted a substantial decrease in the amount of trees removed from the forests.

