

Record of Decision for the Coconino National Forest Land and Resource Management Plan Coconino, Gila, and Yavapai Counties,



Arizona

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer and lender.

Printed on recycled paper - March 2018

Record of Decision for the Coconino National Forest Land and Resource Management Plan

Coconino, Gila, and Yavapai Counties, Arizona

Lead Agency: USDA Forest Service

Responsible Official: Calvin N. Joyner

Regional Forester

USDA Forest Service, Southwestern Region

333 Broadway Blvd. SE Albuquerque, NM 87102

For Information Contact: Laura Jo West

Forest Supervisor

Coconino Forest Supervisor's Office

1824 S. Thompson Street Flagstaff, AZ 86001 (928) 527-3600

coconino_webmail@fs.fed.us]

Errata

Record of Decision for the Coconino National Forest Plan 11/01/2019

Page 36, Response to Public Concerns, Mount Elden Management Area as Wilderness or Primitive/Semi-Primitive Non-Motorized. Deleted and added wording to clarify that Mt. Elden has not been exclusively categorized as Primitive (P) or Semi-Primitive, Non-Motorized (SPNM):

One stakeholder requested that the *entire* Mount Elden Management Area be considered for wilderness designation or given a Recreation Opportunity Spectrum (ROS) classification of primitive or semi-primitive non-motorized. The Mount Elden area was considered for wilderness designation as part of the wilderness evaluation process the Forest conducted for the forest plan revision effort. The Mount Elden area was screened out during the inventory step of the evaluation. After boundary adjustments were made for private land, communication towers, a Forest Service lookout tower, utility corridors, other special use permits, and associated roads, the area no longer met the 5,000-acre criteria for potential wilderness areas. It was removed from further consideration at that time. The suggestion to classify the entire Mount Elden Management Area as either has not been assigned recreation opportunity spectrum (ROS) settings of primitive or semi-primitive non-motorized ROS was not adopted as suggested. Naturalness, access, remoteness, facilities, and site management were incorporated in GIS modeling to identify the spatial arrangement of recreational opportunities and ROS classes across the Coconino National Forest. This modeling indicates that less than 10 percent of the management area meets the criteria for the semi-primitive non-motorized ROS classification, and that none of it meets the criteria for the primitive ROS classification. The ROS modeling conducted for the forest plan revision reflects that less than 10 percent of the management area should have an ROS class of semi-primitive non-motorized and none of the management area should have an ROSclass of primitive. Classifying this entire management area as suggested semiprimitive nonmotorized or primitive ROS would create a situation where many existing uses in the area would be inconsistent with the assigned ROS classes. Rather, by retaining the settings identified in the Flagstaff-Lake Mary Environmental Assessment (FLEA) of 2004, this management area includes a combination of semi-primitive non-motorized, semi-primitive motorized, and roaded natural ROS classes (see pages 294-295 of the FEIS, Volume 1).

Table of Contents

Introduction	1
Forest Setting	1
Needs for Change	
Collaboration with State and Local Governments and other Federal Agencies	
Tribal Consultation	
Public Involvement	6
Land and Resource Management Planning	8
Alternatives Considered	
Alternatives Considered but Eliminated From Detailed Study	13
My Decision	
Components of the Decision	
Rationale for Decision	23
Response to Public Concerns	30
Environmentally Preferred Alternative	
Net Public Benefits	
Science Consistency	39
Compatibility with Goals of Other Public Agencies and Indian Tribes	40
Environmental Justice	
Consultation with the Fish and Wildlife Service	41
Findings Related to Other Laws and Authorities	
Project ConsistencyProject Consistency	
Plan Implementation	
Maintaining the Land Management Plan and Adapting to New Information	
Effective Date	
Appeal Information	51
Approval	53
List of Tables	
Table 1. Special Areas Addressed in Revised Plan for the Coconino National Forest	19
Table 2. Federally listed, proposed, and candidate species; and designated or proposed critical	
habitats analyzed in the biological assessment	42

Introduction

This public Record of Decision (ROD) documents my decision and rationale for approving the revised Coconino National Forest Land and Resource Management Plan (also referred to as "revised plan"). This revised plan provides Coconino National Forest-specific guidance and information for project and activity decision making, and will guide all resource management activities on the Coconino National Forest (NF) (also referred to as "Forest") for the next 10 to 15 years. It replaces the previous Plan (also referred to as "1987 Plan), which was approved in 1987 and has been amended 25 times. My decision facilitates the goal of the Department of Agriculture to promote sound land stewardship in partnership with communities.

Forest Setting

The Coconino NF covers approximately 1.8 million acres in north central Arizona and is located mostly within Coconino and Yavapai Counties, with a small portion in Gila County. The Coconino NF shares boundaries with the Kaibab, Prescott, Apache-Sitgreaves, and Tonto National Forests, private land, and lands administered by the State of Arizona (also referred to as "State") and National Park Service. The Coconino NF is adjacent to the Yavapai-Apache Nation near Camp Verde and is about 6 miles from the Navajo Nation Reservation boundary.

The Forest ranges in elevation between 2,600 and 12,633 feet. Numerous cinder hills and volcanoes of the San Francisco Mountains volcanic field pockmark the northern portion. Dominated by the San Francisco Peaks, the northern edge of the Forest includes Mt. Humphreys, the highest point in Arizona. The Mogollon Rim, a 1,000-foot high cliff that runs for about 200 miles across central Arizona, delineates the southeast border of the Forest. Deep canyons containing several perennial streams dissect it. The Verde River forms the southwest boundary of the Forest while one of its major tributaries, Sycamore Canyon, separates the Coconino NF from the Kaibab and Prescott National Forests on the west. The Forest has a high diversity of vegetative communities due to the wide range of elevations, complex topography, and the presence of perennial water. Vegetative communities at the lowest elevations are desert scrub and riparian areas supporting cottonwoods and willows while the highest elevation atop the San Francisco Peaks is the only well-developed alpine tundra in Arizona. In between, are extensive areas of pinyon juniper, ponderosa pine, and mixed conifer forests interspersed with grasslands and scattered pockets of aspen at higher elevations. Riparian vegetation lines perennial and intermittent streams.

The Coconino NF contains more water than on most of the surrounding landscapes. There are about 272 perennial stream miles on the Forest. Mormon Lake is Arizona's largest natural lake. There are 14 reservoirs, constructed primarily for municipal water use (including the City of Flagstaff, the Town of Payson, and communities in northern Gila County), recreation, and livestock. Oak Creek and Fossil Creek flow into the Verde River, which is a major water resource for the City of Phoenix. The Forest lies mainly in the Verde River and Little Colorado River Plateau groundwater basins. The areas of highest precipitation and groundwater recharge for these basins occur on Coconino NF lands. The Forest also contains about 78 riparian wetlands totaling about 9,928 acres, the second highest number on National Forest lands in Arizona. Over 340 springs occur on the Forest.

Record of Decision for the Coconino National Forest Land and Resource Management Plan

All of the natural features of the Coconino NF combine to make it an important part of the social and economic environment for the three counties on the Forest and in the surrounding area. Recreation, wood products, livestock grazing, and the contribution of local Forest Service offices generate substantial jobs and income. These activities annually support over 5,500 jobs and create over \$212 million in labor income.

The diverse ecosystems found on the Coconino NF provide popular recreational activities for forest visitors. The San Francisco Peaks are the home of the Arizona Snowbowl ski area. The Peaks provide a year round attraction for alpine recreation. The red rock formations and desert ecosystem found in the southwestern part of the Forest provide a dramatically different recreation setting, as do the dense forest and numerous canyons along the Mogollon Rim in the southeastern part of the Forest. Recreation on the Coconino NF annually supports over 2,600 jobs and generates nearly \$99 million in labor income.

Domestic livestock grazing and logging of ponderosa pine started with the Anglo-American and Hispanic settlement of this area in the late 1800's. Livestock grazing has occurred on the Coconino NF since the 1870s. Large herds of sheep and cattle grazed the area in the 1880s and 1890s. Livestock management began with the creation of the Forest Reserves in the 1890s and the Coconino NF in 1908. Livestock grazing continues to be an important cultural aspect of the Coconino NF today. The grazing program on the Coconino NF annually supports over 300 jobs and generates over \$5 million dollars in labor income.

The Coconino NF enhanced its economic contributions to the community through the Flagstaff Watershed Protection Project (FWPP) in recent years. FWPP is a community funded partnership between the City of Flagstaff, the State of Arizona, and the Coconino NF to reduce the risk of devastating fire and post-fire flooding in the Rio de Flag and Lake Mary watersheds. The Coconino NF will continue to build on that success with projects under the Four Forest Restoration Initiative (4FRI), including the C.C. Cragin Watershed Protection Project. 4FRI is a collaborative, landscape scale initiative that is designed to improve forest health and sustainability on 2.4 million acres of fire-adapted ecosystems on the Kaibab, Apache-Sitgreaves, Tonto and Coconino National Forests. The timber program will annually support over 2,000 jobs and generate over \$80 million in labor income with full implementation of 4FRI.

American Indians are a significant part of the Forest history and their traditional uses remain an important part of the cultural landscape of the Coconino NF. American Indian tribes have lived for centuries on the land that is now the Coconino NF, and the Forest Service recognizes and respects those relationships to the land. Some tribes consider the prehistoric sites on the Forest to be the homes of their ancestors or recognize particular sites and places to be of historical, cultural, and religious significance. The Forest regularly consults with 13 American Indian tribes: Fort McDowell Yavapai Nation, Hopi Tribe, Hualapai Tribe, Havasupai Tribe, Navajo Nation, Pueblo of Acoma, Pueblo of Zuni, San Carlos Apache Tribe, San Juan Southern Paiute Tribe, Tonto Apache Tribe, Yavapai-Apache Nation, Yavapai-Prescott Tribe, and the White Mountain Apache Tribe.

The diverse ecosystems on the Forest provide habitat for a wide array of wildlife, fish, and plants. There are a number of unique species such as the Chiricahua leopard frog, and rare plants like the San Francisco Peaks ragwort, which only grows in the tundra zone of the San Francisco Peaks, and Arizona cliffrose. Fifteen native fish species occur on nearly 80 percent of the perennial streams; some only occur in this area.

Needs for Change

The need for change and subsequent revised plan is an outcome of extensive collaboration with State and local governments, other Federal agencies, tribal consultation, and engagement with the public and special interest groups. Initiation of Forest plan revision on the Coconino NF was based on legal requirements and significant changes in conditions, demands, and scientific understanding since the 1987 plan went into effect.

The National Forest Management Act (16 U.S.C. 1606(e)(5)) directs the Forest Service to revise plans that are more than 15 years old or where there are significant changes in conditions, demands, or scientific information. In accordance with this direction, the Coconino NF reviewed the 1987 plan to determine if its guidance was applicable to current and future management needs. The Coconino NF also outlined new conditions for consideration, and opportunities to better address ongoing challenges. Documentation of this preparatory work is in the "Analysis of the Management Situation," which was completed in May 2010 (USDA Forest Service 2010a). Through the "Analysis of the Management Situation," the Coconino NF identified current ecological and socioeconomic conditions and trends taking place on the forest and the associated "needs for change" to be addressed in the revised plan. The needs for change are summarized into three broad revision topics: (1) community-forest interaction, (2) recreation, and (3) maintenance and improvement of ecosystem health.

Revision Topic 1: Community-Forest Interaction

Relationships with the surrounding communities have changed significantly since the 1987 plan was developed. Some of the trends and conditions related to forest–community interaction include: a shift from a commodity-based (timber, mineral development) to service-based (recreation) economy; population growth and loss of forest access or open space; and increased demand for community infrastructure.

Some of the actions identified to address the changing conditions and trends related to community-forest interaction include:

- Updating plan language to acknowledge open space values.
- Updating plan language to acknowledge potential future community growth and expansion desires.
- Updating guidance on energy and mineral development.
- Providing guidance related to forest products and consideration of culturally important forest products.
- Clarifying regulatory authorities relating to air quality and include approaches for addressing smoke and fugitive dust emissions.
- Reviewing and updating plan guidance on communication sites.

Revision Topic 2: Recreation

Recreational use of the Coconino NF has changed significantly since the 1987 plan was developed. Some of the trends and conditions related to recreation include: increased use of developed recreation areas; changing demographics; increased conflicts in due to social values, culture, and expectations tied to public lands, for example between those who believe that only recreational activities that are less disruptive of nature (wildlife viewing or hiking) should occur on the Forest and those who believe the

Record of Decision for the Coconino National Forest Land and Resource Management Plan

Forest should be equally available for all recreation types (hiking, off-road vehicle use, large group events); new types of recreation; the adoption of a new scenery management system; increased recognition of interactions between recreational activities and tribal or cultural values and uses; and pressures from recreational activities on riparian, wilderness, and other special areas.

Some of the actions identified to address the changing conditions and trends related to recreation include:

- Updating desired conditions and other plan components for recreation and scenery management where guidance is partial or absent in the 1987 plan.
- Updating the plan components for existing special areas.
- Incorporating special area recommendations and related plan components into the revised plan.

Revision Topic 3: Maintenance and Improvement of Ecosystem Health

Since development of the 1987 plan, there is new knowledge on forest ecosystems. The agency has a better understanding of the conditions that were historically present in the forested ecosystems on the Coconino NF and the ecological processes that maintained those ecosystems. Some of the trends and conditions related to ecosystem health include: changed frequency and severity of natural disturbances in fire-adapted ecosystems; the decline of aspen; and the loss of understory species. Review of the 1987 plan also identified a lack of or inadequate plan direction addressing: each ecological resource, including rarer ecosystems (e.g., tundra, spruce-fir, and riparian); susceptibility and resiliency to historically uncharacteristic environmental disturbances (e.g., extreme weather fluctuations or variability, fire, drought, insects, and disease); invasive species; and habitat connectivity.

Some of the actions identified to address the changing conditions and trends related to the maintenance and improvement of ecosystem health include:

- Updating desired conditions and objectives for soil resources.
- Integrating and updating management direction for riparian, aquatic, and water resources.
- Incorporating desired conditions that reflect the composition, structure, and natural disturbance attributes appropriate for the different ecosystems, and integrate desired conditions across different resource areas.
- Addressing invasive exotic flora and fauna.
- Ensuring plan components address concerns of forest analysis species 1 and their habitat.
- Addressing the importance of habitat connectivity.
- Integrating strategies to address effects of susceptibility and resiliency to historically uncharacteristic environmental disturbances (e.g., extreme weather fluctuations or variability, fire, drought, insects, and disease).

¹ Forest analysis species are plant, animal, and aquatic species considered for analysis during the forest plan revision process.

Collaboration with State and Local Governments and other Federal Agencies

Forest Service planning regulations require the agency to consider the plans and policies of State and local governments, as well as the plans and policies of other Federal agencies. The Coconino NF engaged in a number of discussions with State and local governments, and other Federal agencies to discuss the revised plan throughout the duration of the plan revision effort. Concerns identified by State and local governments focused on access, smoke impacts to air quality, management, and development of forest lands. Developing the revised plan included input from these governmental entities, as well as collaboration with State and local agencies, local government and community leaders, and Federal agencies, including the U.S. Fish and Wildlife Service.

The Arizona Game and Fish Department was particularly active in the revision process, especially on matters related to management of access by motor vehicles and recommendations for additional wilderness. I appreciate the Department's cooperative spirit and detailed feedback throughout this effort and for working with the Forest to develop plan direction that ensures management of motorized access and motorized big game retrieval that is compatible with the goals of the Department and the Forest.

To address the concerns regarding access, the revised plan includes a desired condition to provide for reasonable motorized access to cities, counties, the State, and the public, as well as other Federal entities, for permissible uses, such as recreation, fire management, wildlife management, and access to infrastructure or neighboring land. The revised plan also includes several management approaches that encourage the Forest to work closely with the counties, the State, and other Federal agencies to ensure that National Forest System roads meet objectives for all ownerships. The revised plan acknowledges that motor vehicle use may occur outside of the designated system of roads, trails, and areas identified on motor vehicle use maps when authorized by law, permits, and orders in connection with resource management and public safety.

To address the concerns related to air quality, the revised plan includes a desired condition for the air quality on the Coconino NF to meet State and Federal air quality standards. The revised plan also directs prescribed burns and wildfires to be managed to incorporate emission reduction techniques and for smoke sensitive areas to be identified and smoke impacts to be mitigated.

The revised plan also addresses the concerns related to management and development of forest lands. The revised plan recognizes the role the Coconino NF can play in supporting infrastructure development, providing a variety of recreation opportunities, and providing access to other lands.

Since the release of the Draft Environmental Impact Statement (Draft EIS), the Forest Supervisor and other management team members have engaged state and local representatives, Congressional leadership, and agencies. In general, these governmental representatives support the work of the Forest and appreciate the transparent communication and the dedication of the Coconino NF towards public land stewardship. The counties remain in overall support of the revised plan.

Tribal Consultation

Thirteen federally recognized tribes have ties to the Coconino NF: Fort McDowell Yavapai Nation, Hopi Tribe, Hualapai Tribe, Havasupai Tribe, Navajo Nation, Pueblo of Acoma, Pueblo of Zuni, San Carlos Apache Tribe, and San Juan Southern Paiute Tribe. The Coconino NF first notified all of these tribes of forest plan revision in September 2006, with a letter announcing the start of the revision process and the dates for the first round of public meetings. Information sharing has continued throughout the plan revision process, both in written correspondence and face-to-face meetings. The plan revision team has sent written communications to the tribes and has held several plan revision sessions and meetings specifically for tribal government and tribal members. Engagement with area tribes included 17 face-to-face meetings and numerous invitations for involvement in the forest plan revision process. The Forest held meetings with tribal elders, government representatives, and community members. Tribal comments included concerns related to increased development on the Forest, cultural resource protection, and availability of forest products for traditional and cultural purposes. Consultation with affiliated tribes ensured the revised plan components addressed the above tribal concerns and needs with respect to the Coconino NF.

Public Involvement

A variety of opportunities for meaningful dialogue and public involvement occurred throughout the plan revision process, including the initial ecological and socioeconomic sustainability assessments, development, and finalization of the revised plan, and the consideration of effects in the Final Environmental Impact Statement (Final EIS). Chapter 1of the Final EIS explains how the proposed revised plan has been adjusted in response to public involvement and collaboration over the course of many years.

The Coconino NF hosted multiple public meetings in nearby communities with local, State, and tribal governments, as well as with individual community members and other Federal agencies. To reach the wide diversity of stakeholders, the Coconino NF also participated in meetings with counties, municipalities, the State of Arizona, the Governor's Oversight Council, and the Greater Flagstaff Forest Partnership, tribes and chapter houses, and groups and individuals interested in the social and ecological impacts related to the management of the Coconino NF. Beginning in 2006, plan revision information and process updates were periodically distributed to individuals and organizations, as well as posted on the Coconino NF Plan Revision Web site (http://www.fs.fed.us/r3/coconino/plan-revision.shtml). News releases and public meeting/open house announcements were shared with the public via email, the Coconino NF Twitter feed, and/or local newspapers. The Coconino NF placed information and meeting notices and announcements in several State and local newspapers: the Arizona Daily Sun (Flagstaff, AZ), Red Rock News (Sedona, AZ), Camp Verde Journal (Camp Verde, AZ), Verde Independent (Cottonwood, AZ), and Camp Verde Bugle (Camp Verde, AZ).

Informal public involvement started in mid-2006 prior to the publication of the notice of intent (NOI). Public meetings, information in the Coconino NF Annual Stakeholders Report, letters, emails, phone calls, radio announcements, and postings to the Coconino NF Web site shared and gathered information and encouraged participation in the plan revision process. Plan revision team members also gave

presentations, went to the field, and met with individuals and groups. Early in the revision effort, four topic-based workgroups were also formed to focus on special areas and socioeconomic, ecological, and species diversity. Information collected from the public identified the needs for change discussed in the "Analysis of the Management Situation" (AMS) (Forest Service 2010). Topics brought forward by the public and other agencies were then summarized in the AMS and presented to the Coconino NF leadership team. Some of these topics included forest products and industry, fuel reduction, livestock grazing, roads and trails, species diversity, special management areas, water and riparian areas, open space, land exchanges, and places of interest.

After publication of the NOI, the Coconino NF held two rounds of open house/workshop style public meetings—one round in November 2010 and another in March 2011—to: (1) provide information on the current status of plan revision; (2) present, discuss, and request review of draft language in the proposed plan; (3) receive input regarding whether the proposed plan adequately addressed the needs for change; and (4) identify other issues/concerns which still needed to be addressed. Public meetings were held in Flagstaff, Cottonwood, Happy Jack, and Camp Verde. The plan revision team also held "office hours" at locations in Flagstaff, Happy Jack, and Sedona to allow additional opportunities for the public to discuss the proposed revised plan with plan revision team members in a more one-on-one setting.

Public input gathered from these meetings, as well as written comments, were used to further refine the proposed revised plan including: clarifying the important ecological function of old-growth forest and their presence/distribution on the landscape; adding guidelines to reduce road impacts to wildlife and watershed condition; encouraging collaboration with partners to improve habitat connectivity across the landscape; designating Cottonwood Basin Fumeroles as a geological special area; and adding desired conditions to research natural areas (RNAs) to guide grazing management in those areas. Public input that could not be integrated into the proposed revised plan was used in the development of alternatives to the proposed revised plan.

After distribution of the Draft EIS and proposed revised plan in December 2013, the 90-day comment period gathered additional public input. During the comment period, the Coconino NF hosted: 7 public meetings spanning 2 rounds (3 meetings in January 2014, and 4 meetings in February 2014), which were held in Flagstaff, Sedona, and Happy Jack; 20 internal meetings with different resource specialists and district staff; and other meetings requested by the Hopi Tribe, San Carlos Apache Tribe, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and a handful of local organizations. The purpose of the first round of public meetings was to inform participants of the contents of the Draft EIS and proposed revised plan and to share tips for reviewing these documents. These meetings provided additional opportunity to ask participants what topics they wanted additional information on during the following round. Based on their feedback, the narrowed focus of the second round of meetings covered forest uses under permit, motorized recreation, dispersed recreation, wildlife and water resources, wilderness, and special areas.

At the conclusion of the 90-day comment period on the Draft EIS and proposed revised plan, the Coconino NF had heard from over 1,700 commenters through 100 unique comment letters, which included over 1,100 individual comments. Commenters included: city, county, and State governments; the Navajo Nation and White Mountain Apache Tribe; utility companies; various environmental and user-related organizations; individual citizens; and other Federal agencies. Comments ranged from expressing

a preference for a specific plan alternative, to providing alternate analyses, to pointing out typographical errors in the documents. Some of the most common topics included: municipal watershed and water supply, use of reclaimed water; motor vehicle use (access); wilderness recommendations; specific management areas; monitoring of susceptibility and resiliency to historically uncharacteristic environmental disturbances (e.g., extreme weather fluctuations or variability, fire, drought, insects, and disease); species viability; management indicator species; and specific language within the plan components (i.e., desired conditions, objectives, etc.). In response to the comments received during the 90-day comment period on the Draft EIS and proposed revised plan, a number of adjustments were made to the structure and language in the proposed revised plan, which was renamed Alternative B (modified). These adjustments made the revised plan easier to use, removed duplicative plan language, clarified or elaborated on plan language, and added new plan language. Additional and more detailed information on public comments can be found below in the Response to Public Concerns section and in appendix D in the Final EIS.

Land and Resource Management Planning

Nature of Forest Plan Decisions

The 1976 National Forest Management Act (NFMA) outlines the nature of forest plan decisions. NFMA requires all forests in the National Forest System to develop plans that direct resource management activities on the forests. These plans are to be revised when conditions have changed significantly, or on a 10 to 15-year cycle.

The revised plan establishes a framework for future decision making by outlining a broad, interdisciplinary program for achieving the desired goals, objectives, and future conditions of the Forest. It represents decisions that are strategic in nature, does not make a commitment to the selection of any specific project, and does not dictate day-to-day administrative activities needed to conduct the Forest Service's internal operations (e.g. personnel matters, law enforcement, fleet management, or organizational changes). By applying programmatic management direction, the revised plan is carried out through the design, implementation, and monitoring of site-specific activities such as relocating a trail, conducting a prescribed burn, or harvesting timber. Subsequent decisions for these activities will be designed to be consistent with the strategic decisions made in the revised plan and are subject to separate analysis under the National Environmental Policy Act (NEPA).

A Final EIS accompanies the revised plan, which provides analysis that discloses the environmental consequences of the alternative management strategies considered and discusses how these alternatives respond to issues and concerns raised during internal and collaborative processes.

The Revised Forest Plan

Initiation of forest plan revision on the Coconino NF is based on legal requirements and significant changes that have occurred in conditions, demands, and scientific understanding since the 1987 Plan went into effect. Need for revision is based on the following:

- The 1987 plan is beyond the 10 to 15 year duration provided by the National Forest Management Act (16 U.S.C. 1606(e)(5)(A))
- Assessment of the sustainability of social, economic, and ecological forest resources in light of continued management under the 1987 Plan indicated several needs for change, which are documented in the Analysis of the Management Situation (AMS), as required by the 1982 Planning Rule. The "Needs for Change" section earlier in this ROD provides further detail
- New science and information has become available since the development of the 1987 plan more than 25 years ago

With this decision, the selected alternative will become the revised Coconino NF Land and Resource Management Plan. This revised plan replaces the 1987 Plan. The revised plan is part of the long-range resource planning framework established by the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA), the Government Performance and Results Act of 1993 (GPRA), and the 2012 Revision of the USDA Forest Service Strategic Plan. The Final EIS and revised plan were developed according to the NFMA, its implementing regulations at 36 Code of Federal Regulations (CFR) 219; the National Environmental Policy Act of 1969 (NEPA), the Council of Environmental Quality (CEQ) regulations at 40 CFR 1500-1508, and the Forest Service NEPA regulations at 36 CFR 220.

According to the transition language in the 2012 Planning Rule at 36 CFR 219.17(b)(3), the responsible official may elect to complete and approve the plan revision in conformance with the provisions of a prior planning regulation (36 CFR part 299, published at 36 CFR parts 200 to 299, revised as of July 1, 2010). For this revision of the Coconino NF Land and Resource Management Plan, I have elected to follow these provisions, referred to collectively in this document as the 1982 Rule.

This decision applies only to National Forest System lands of the Coconino NF located in the aforementioned counties. It does not apply to State, municipal, or private lands, or any other Federal lands, although the effects of activities occurring on these lands and the effects of my decision on lands that surround the Coconino NF are also considered.

Alternatives Considered

This section describes the alternatives considered in this ROD in order to provide important context for the decision being made. The Coconino NF analyzed four alternatives in detail: No Action (Alternative A), Proposed Action (Alternative B (modified)), and two alternatives developed in response to issues raised by the public, Primitive Settings Emphasis Alternative (Alternative C), and Access and Development Emphasis Alternative (Alternative D).

All alternatives in the Final EIS adhere to multiple use and sustained yield of goods and services (36 CFR 219.1(a), (b)). In addition, they share objectives and standards for managing forest resources and complying with applicable laws and policies. They also contain the same direction to contribute to the diversity of desired native and non-native plant and animal communities and contribute toward the recovery of threatened and endangered species.

The need for change topics drove alternative development. The primary difference between alternatives is the emphasis on wilderness or motorized recreation to meet the purpose and need for change, and address one or more of the revision topics.

Each alternative was developed to be in compliance with applicable laws and regulations, as well as national policy and direction. The following objectives did not change between all four alternatives in the Final EIS:

- comply with laws, regulations, and policies
- sustain environmentally acceptable multiple uses of products from, and services on the Coconino NF, which include special uses for various purposes, including the right to access and develop leasable and locatable minerals; harvest fuelwood and other forest products, graze livestock and produce forage; and engage in various recreational activities, such as hunting, hiking, camping, and fishing
- cause no significant or permanent loss of productivity of the land
- maintain air quality that meets or exceeds applicable State, local, and/or Federal standards or regulations
- protect heritage resources
- recognize and respect the unique status of Native American tribes and their rights conveyed by trust and treaty with the United States
- require consultation with tribes about traditional resources, ties, and interests about site-specific proposed actions
- continue to protect specially designated areas (e.g., wilderness, eligible wild and scenic rivers, research natural areas)
- provide suitable, well-distributed habitat across the Coconino NF to ensure species viability
- include measures for preventing the destruction or adverse modification of critical habitat for threatened and endangered species
- provide for and maintain a diversity of plant and animal communities to meet multiple-use objectives
- conserve soil and water resources

The proposed action (Alternative B (modified)), Alternative C, and Alternative D each include management direction that preserves the overall undeveloped character of inventoried roadless areas on the Coconino NF. The no action alternative does not include specific management direction for inventoried roadless areas because the 1987 plan became effective prior to the designation of inventoried roadless areas, and therefore, did not address them at all. Under this alternative, the inventoried roadless areas would still be subject to the 2001 Roadless Area Conservation Rule at 36 C.F.R. Part 294 (2001).

No Action Alternative (Alternative A)

Alternative A is the no action alternative, and recommends the continuance of the 1987 plan (as amended) for the next 10 to 15 years. The 1987 plan:

- Contains standards and/or guidelines that: are often unnecessarily prescriptive about how to implement
 a project, instead of focusing on the project's outcome; do not support attaining desired conditions or
 accomplishing outcomes; are sometimes duplicative and conflict with or reiterate direction found in
 other law, regulation, and policy; are based on outdated policy, science, and information; require the use
 of metrics that are difficult to use; and provide minimal guidance for mineral exploration and
 development.
- Emphasizes: production of timber products; providing habitat for Mexican spotted owls, northern goshawks, and their prey; providing recreation opportunities to meet demand; and livestock grazing.
- Addresses uses and resources separately, without recognition of interrelationships between the two.

- Provides no or limited desired conditions for many important resources and uses, including soils, grasslands, wetlands, springs, traditional cultural use, air quality, and invasive species.
- Includes highly prescriptive old growth direction that requires allocation at least 20 percent of each forest type within a 10,000 acre block to old growth based on minimum structural attributes.
- Provides updated management direction in the Sedona-Oak Creek and Flagstaff-Lake Mary areas under amendments 12 and 17.
- Manages scenery to meet visual quality objectives developed under the Visual Management System.

Proposed Action (Alternative B (modified))

In light of the needs for change and major themes outlined above the Coconino NF developed Alternative B, the proposed action. Through the iterative collaboration process used for this plan revision effort, modifications were made to respond to external and internal comments on the proposed action. These adjustments are reflected in Alternative B (modified), the revised plan and final proposed action. This alternative was modified from the original proposed action to respond to comments received during the 90-day comment period on the Draft EIS. The modified proposed action includes the following:

- Provides for sustainable uses that support vibrant communities and honors the Forest's human history, while meeting current demands, by:
 - Continuing to emphasize frequent and substantial involvement by State agencies and county and municipal governments.
 - Identifying 522,174 acres of suitable timberlands which, through management on a regulated basis with planned, scheduled entries, will yield an annual average of 196,809 CCF (hundred cubic feet) (or 112,462 MBF (thousand board feet)) of wood products, benefiting local and regional industry and individual users.
 - Generating wood through restoration-based thinning activities, which will increase the Forest's contribution to timber related jobs and add diversity to the local economy.
 - Supporting traditional Western lifestyles by establishing desired conditions and guidelines that provide forage and opportunities for livestock grazing, while using adaptive management and balancing use and capacity consistent with the other desired conditions in the revised plan.
 - Providing reasonable motorized access to partners and stakeholders for wildlife management, recreation, fire management, and access to infrastructure or neighboring land.
 - Establishing desired conditions, guidelines, and a monitoring item to ensure traditionally used resources are available and managed so they are not depleted and meet the needs of future generations.
 - Establishing cultural objectives related to educational and interpretive programs and cultural resource surveys.
 - Establishing desired conditions and guidelines that provide for diverse and sustainable recreation opportunities; and establishing scenic integrity objectives developed under the Scenery Management System.
 - Providing standards for certain special uses, including energy transmission and development, mineral and mining activities, and recreation special uses, to ensure that authorization of these activities is consistent with the other desired conditions in the revised plan.
 - Restoring Ponderosa Pine and Mixed Conifer with Frequent Fire Ecological Response Units, which would provide increased protection to communities, infrastructure, and watersheds.
- Retains most of the updated management direction for the Sedona-Oak Creek and Flagstaff-Lake Mary areas. In some cases, direction that was specific to these areas has been adapted to have forest-wide application.

- Establishes determinations for Recreation and Transportation suitability.
- Facilitates restoration of the structure, composition, and processes of frequent fire ecosystems by providing:
 - A framework for ecosystem restoration based on decades of ecological research (synthesized in General Technical Reference (GTR)-310 by Reynolds et al. (2013)) which will move frequent-fire adapted systems (i.e., Ponderosa Pine and Mixed Conifer with Frequent Fire Ecological Response Units) toward increased resiliency by restoring spatial arrangement, structure, and species composition of vegetation. Treatments are focused in those Ecological Response Units that are most divergent from desired conditions, priority watersheds, wildland-urban interface, and locations identified in community wildfire protection plans.
 - Desired conditions for forest and grassland ecosystems related to species composition; frequency, severity, intensity, and size of fire disturbance events; structural characteristics such as vegetation density, arrangement, age distribution; and key habitat components.
 - Objectives to use fire and mechanical treatments to facilitate ecosystem restoration.
 - Standards and guidelines for vegetation management, forestry and forest products, and activities following large-scale disturbances to: ensure minimum management requirements established by the 1982 Planning Rule are met; maintain or establish a trajectory toward the desired vegetation composition and structure; retain appropriate levels of snags, logs, and woody debris for resource benefits; manage for high quality scenery; and minimize the spread of non-native invasive plants.
- Protects and restores rare and unique resources that support high levels of biodiversity, such as aspen and natural waters, by providing:
 - Desired conditions for springs and wetlands that describe healthy and functional physical and biological systems and that the location and status of springs and water resources are known, organized, and available.
 - Objectives to restore the condition of springs and wetlands.
 - Desired conditions for healthy aspen in natural patterns of abundance and distribution that provide diversity and wildlife refugia in an otherwise conifer-dominated landscape.
 - An objective to restore aspen.
 - Desired conditions that ensure there is habitat and refugia for species that are narrow endemics, that have restricted distributions, and/or that have declining populations.
- Provides guidance for 18 management areas on the forest that are organized around the ecological and social resources on the Coconino NF.
- Identifies approximately 8,733 acres in three potential wilderness areas (PWAs) for wilderness recommendation.
- Proposes 2,074 acres as three additional research natural areas.
- Designates 763 acres as a geological and botanical area.
- Establishes a monitoring strategy that identifies monitoring questions designed to determine how well the revised plan is working. The monitoring strategy identifies the existing data sources for use in answering these monitoring questions. It also contains components for a broader adaptive management framework, including an implementation guide and periodic assessment and review. The monitoring framework was developed with the 2012 Planning Rule in mind to facilitate the transition to the 2012 rule monitoring requirements. It also responds to key stakeholder concerns related to: sufficient resources to accomplish the monitoring; measurable variables; ability to adapt in response to new information; and robust study designs that provide statistically valid conclusions.

Primitive Settings Emphasis Alternative (Alternative C)

Alternative C is similar to the proposed action, but it responds to public recommendations for more wilderness areas, as well as other areas that provide for reduced human-related disturbance. Alternative C increases opportunities for primitive recreation by recommending thirteen new wilderness areas. In addition, eight management areas would be managed to reduce motor vehicle disturbance. In response to public concerns to retain specific protections for old and large trees in the 1987 plan, alternative C also retains many of the 1987 plan standards and guidelines for old growth.

Access and Development Emphasis Alternative (Alternative D)

Alternative D is similar to the proposed action, but is responsive to public recommendations for increased human-driven use and development of the Coconino NF by not recommending additional wilderness areas, by allowing bicycling on designated trails in botanical and geological areas, and by better accommodating future energy corridor expansion needs through targeted adjustments to scenic integrity objectives. Alternative B (modified) incorporates the suitability of bicycling on designated trails in botanical and geological areas.

Resource Planning Act Alternative

The provisions of the 1982 Planning Rule regulations at 219.12(f)(6) require forest plans to respond to and incorporate the Renewable Resource Planning Act Program objectives for each national forest as displayed in regional guides. There is no longer a regional guide for the Southwestern Region. This was withdrawn as required by the 2000 Planning Rule at 219.35(e)(2000 rule). The last Renewable Resource Planning Act Program was developed in 1995. In lieu of the Renewable Resource Planning Act Program, the Forest Service Strategic Plan 2015–2020 provides broad overarching national guidance for forest planning and national objectives for the agency as required by the Government Performance Results Act. All alternatives in the Final EIS address these broad strategic objectives.

Alternatives Considered but Eliminated From Detailed Study

In addition to the four alternatives described above, several alternatives were considered but not given detailed study. These alternatives considered public comments received in response to the proposed action and provided suggestions for alternative methods for achieving the purpose and need. Some of these alternatives were outside the scope of the plan revision process or already addressed by the alternatives considered in detail. The following alternatives were considered, but dismissed from detailed consideration for reasons summarized below. Chapter 2 in the Final EIS provides further detail on these alternatives.

Prohibiting Fires as a Management Tool

This alternative considered the management of vegetation on the Coconino NF solely by mechanical means and would have eliminated the use of prescribed fire with the goal of reducing smoke-related impacts to air quality in surrounding communities. This alternative was considered but not analyzed in detail because it is inconsistent with the management needs of the fire-adapted ecosystems on the Coconino NF. Fire is an essential disturbance agent in fire-adapted/dependent ecosystems (i.e., Ponderosa Pine, Mixed Conifer with Frequent Fire, Pinyon Juniper, Semi-desert Grassland, and Interior Chaparral Ecological Response Units (ERUs)). For these ecosystems the viability of growth, structure, function, and health of the forest is dependent on a fire regime. All alternatives considered in detail include direction to meet State and Federal air quality standards and reduce smoke impacts to the public.

Restriction on Cutting Trees with a Sixteen-inch or Greater Diameter

Public comments requested an alternative that restricted the cutting of any tree that has a diameter of 16 inches or greater. This alternative was considered but not analyzed in detail because the Coconino NF determined that applying this diameter restriction on cutting trees forest-wide would limit future flexibility in management in terms of the narrowing range in conditions of forest structure and composition and would not help achieve forest desired conditions if applied in all situations. However, decisions to focus on cutting trees of a given size range could still be made at the project level where necessary to move existing conditions toward vegetative desired conditions.

Considering a Motorcycle Trials Area

Public comments requested consideration of a motorcycle trials area on the Coconino NF. Motorcycle trials are a competition that judges how well a rider navigates obstacles (natural and/or constructed) without touching their feet to the ground. This alternative was considered but not analyzed in detail because a motorcycle trials area was too specific a recreation use to include in the revised plan. It was determined that this and other similar specialized recreation uses would be more appropriately considered at site-specific levels.

National Scenic Area Designation for the Sedona-Oak Creek Area

A suggested alternative recommended the creation of a national scenic area designation for the Sedona-Oak Creek area (the areas covered by Amendment 12 in the 1987 Plan). In 2012, the Forest Service expressed support on a legislative effort to create such a national scenic area designation. This alternative was considered but not analyzed in detail because the plan direction that was central to the national scenic area legislative proposal, limitation on land adjustments in the Sedona-Oak Creek area, has been carried into the revised plan and the other alternatives analyzed in detail in the Final EIS. The inclusion of this plan direction effectively addresses the land adjustment concerns in this area and does not hinder community-driven efforts in future for designation of this area as a national scenic areas.

Require Quantitative Assessment of Vegetation

A suggested alternative recommended requiring the quantitative assessment of vegetation to ensure continued ecosystem function and sufficient forage for native ungulates and domestic livestock. This alternative was considered but not analyzed in detail because the desire to have functioning landscapes, including enough vegetation for ecosystem functioning and forage for native and domestic ungulates, is provided for by plan components for vegetation in the alternatives considered in detail and as part of the development of those plan components, vegetative forage was qualitatively analyzed for all species. Agency specialists determined that quantitative analysis as requested is not practical at the forest plan level because climate, site conditions, and native ungulate (such as pronghorn, mule deer, and white-tail deer) use of those sites can vary annually and on a longer term basis. Furthermore, agency policy exists for evaluating the range conditions, drought, and determining permitted levels of livestock grazing on the Forest and so would provide for adequate ecosystem function.

Prohibit or Limit Livestock Grazing

Public comments requested the consideration of an alternative that prohibited or limited livestock grazing on the Coconino NF. The commenters expressed concerns that domestic livestock competed with and displaced wild birds and animal species. Commenters also questioned the Forest's approach to determining the capability and suitability of areas on the Forest to support domestic livestock grazing and suggested alternatives that reduced actual stocking levels by 25 and 50 percent. Alternatives that would eliminate grazing or arbitrarily reduce stocking number by 25 and 50 percent were considered but not analyzed in detail because the Coconino NF contains lands that are potentially capable and suitable for livestock grazing (1,308,276 acres), livestock grazing is an appropriate land use under the Multiple Use-Sustained Yield Act and the National Forest Management Act, and prohibiting or limiting grazing would not meet the Coconino NF's need for change. Agency policy exists for determining permitted levels of livestock grazing on the Forest. Decisions on where and when to authorize grazing and on stocking levels (the number of livestock authorized to graze in an allotment) are made at the project level, not the programmatic level, and based on the conditions that are present in the project area, including wild bird and animal species.

Road Density Standard

An alternative was suggested that would include road density limits across the Forest to limit the impacts of roads on wildlife and watershed conditions. This alternative was considered but not analyzed in detail because road impacts to both wildlife and watersheds are more complex than simple road densities and may be equally affected by road design and location. While alternative A (1987 plan), however, does include standards and guidelines related to road densities, plan language to mitigate road impacts to wildlife and watersheds is only included in alternatives B (modified), C, and D.

Designate Long-term Research Plots

This alternative considered designating long-term research sites across the forest. Such a designation would limit other (non-research) activities that interfere with long-term research purpose(s). This alternative was considered but not analyzed in detail because such designation would be too site specific

for a programmatic forest plan. As with all special uses, the restrictions on other forest activities are more appropriately considered on a case-by-case basis and managed by site-specific projects and proposals consideration of safety, managing user conflict, and the merits of the proposed use.

Prohibit New Road Construction

Commenters on the proposed revised plan and Draft EIS recommended an alternative prohibiting new road construction. This alternative was considered but not analyzed in detail because such a prohibition is considered infeasible. For example, new road construction may be required when access to a particular resource or private inholding is needed. New motorized trails may be needed to provide motorized recreation opportunities, including destinations and loops. Alternatives B (modified), C, and D address the impacts of roads and motorized trails on forest resources. Any new road or motorized trail construction would only be authorized following project-level environmental analysis and would be accomplished using best management practices to minimize resource impacts while providing for forest access needs.

My Decision

I select Alternative B (modified) for the revised Land and Resource Management Plan for the Coconino NF. The revised plan will:

- Contribute over 5,500 jobs and generate over \$212 million in labor income annually to local communities.
- Increase the allowable sale quantity (the amount of wood estimated to be available for sale from land suitable for timber production) to 196,809 CCF (112,462 MBF), up from 175,723 CCF (100,413 MBF) under the 1987 plan.
- Support collaborative relationships with State, county, and local governments.
- Provide for sustainable uses that support vibrant communities and honor the Coconino NF's human
 history, while meeting current demands, by providing for: forest conditions that protect communities,
 infrastructure, and watersheds; air quality; traditional and cultural forest uses; sustainable recreation
 opportunities; scenery; and forest-based economic activities such as wood products industries and
 ranching.
- Restore forests, woodlands, and grasslands that will result in an abundant source of wood that can contribute to local and regional wood-processing and biomass industries and provide fuelwood for local families and trees to tribes for traditional and cultural purposes. Under the revised plan, the Forest envisions treating over 400,000 acres in Ponderosa Pine and Mixed Conifer Frequent Fire ERUs over the next 10 years through a combination of mechanical and prescribed and naturally-ignited wildland fire treatments. This restoration would build on the trend initiated by 4FRI (discussed briefly above in the Forest Setting section).
- Provide for continued livestock grazing that will contribute to the cultural diversity and stability of local communities.
- Allow for greater flexibility in managing the use of naturally-ignited wildland fires in designated wilderness areas and wildland-urban interfaces as a tool to improve ecosystems and reduce the risk of uncharacteristic fire in the future.
- Provide reasonable motorized access for wildlife management, recreation, fire management, and access to infrastructure or neighboring land.

Record of Decision for the Coconino National Forest Land and Resource Management Plan

- Provide the framework for more comprehensive and consistent management of recreation opportunities and scenic resources.
- Provide more comprehensive direction for recreation management that balances between developed and primitive/dispersed recreation opportunities and motorized and non-motorized access and provides more consistent recreation management across the Forest.
- Establish suitability determinations for recreation and transportation.
- Maintain or improve the structure, composition, and processes of the Coconino NF's fire-adapted vegetation types toward desired conditions based on best available scientific information synthesized in GTR-310² by Reynolds et al. (2013). This will result in conditions that are more resilient to disturbances, including uncharacteristic fire, human activities, and climate variability. Management actions which reduce the threat of uncharacteristic wildfire, promote habitat quality, species diversity and structural heterogeneity, increase water yield, protect air quality, and reduce fragmentation all contribute to the Coconino NF's ability to change and adapt to dynamic weather conditions.
- Use a combination of mechanical and prescribed and naturally-ignited wildland fire treatments to restore fire-adapted ecosystems with a focus on treating priority watersheds, areas identified in community wildfire protection plans, and lands in the wildland-urban interface. This will result in improved watershed conditions and reduced threats to local communities from uncharacteristic wildfire. Wood products, forage, and clean air and water would be byproducts from the implementation of the revised plan's restoration activities.
- Protect and restore rare and unique resources that support high levels of biodiversity such as springs, wetlands, aspen, and habitats and refugia for species that are narrow endemics or have restricted distributions and/or declining populations.
- Protect and improve soil and water resources that support terrestrial and aquatic habitat and contribute to high levels of biodiversity.
- Provide for the viability of all species, including the 94 wildlife, fish, and plant species identified as having viability concerns, through habitat desired conditions needed by those species, and standards, guidelines, and objectives that address species-specific needs.
- Provide for the control, treatment, and eradication of non-native plant and animal invasive species. This
 will result in lowering risks to native species, ecosystem function, and the production of goods and
 services.
- Provide guidance for 18 management areas organized around the ecological and social resources on the Coconino NF. Management areas established in the revised plan are Painted Desert, Volcanic Woodlands, Pine Belt, San Francisco Peaks, Inner Basin, Flagstaff Neighborwoods, Mount Elden, Walnut Canyon, Anderson Mesa, Lake Mary Watersheds, Red Rock, Oak Creek, House Mountain-Lowlands, Sedona Neighborwoods, Verde Valley, Long Valley, East Clear Creek and C.C. Cragin Watersheds.
- Provide guidance for a variety of special areas that overlap the 18 management areas. The special areas
 direction addresses Designated and Recommended Wilderness Areas, Designated and Eligible Wild and
 Scenic Rivers, National Trails, Scenic Roads, Established and Proposed Research Natural Areas, and
 Designated Geological and Botanical Areas.
- Recommend three areas to Congress for wilderness designation, covering approximately 8,733 acres.
 All three of the recommended areas are adjacent to existing wilderness and will be managed to improve and/or maintain their wilderness values.

² Reynolds, R.T., A.J. Sánchez Meador, J.A. Youtz, T. Nicolet, M.S. Matonis, P.L. Jackson, D. G. DeLorenzo, and A.D. Graves. 2013. Restoring composition and structure in Southwestern frequent-fire forests: a science-based framework for improving ecosystem resiliency. General Technical Report RMRS-GTR-310. USDA Forest Service, Rocky Mountain Research Station, Fort Collins, Colorado, USA

- Propose three additional research natural areas (RNA), covering approximately 2,074 acres. These areas provide representation in three ecological types (riparian communities, ponderosa pine forest, and alpine tundra) that will broaden ecological diversity of the regional network of research natural areas.
- Designate the Cottonwood Basin Geological and Botanical Area, covering approximately 763 acres. This special area includes unique geological formations and extraordinary botanical diversity.
- Establish a monitoring framework that enables adaptive management.

I have considered how the revised plan responds to the concerns of State, local, and tribal governments, public comments, internal management concerns, and national direction and policy. My decision is based on the management direction in the revised plan, the analysis of effects disclosed in the Final EIS, and the planning record in its entirety. The decision components are fully supported by the environmental analysis documented in the Final EIS, as required by law and regulation. This decision applies only to National Forest System lands on the Coconino NF. It does not apply to any other State, municipal, private, or Federal lands, although the effects of these lands and the effects of my decision on lands surrounding the Coconino NF were considered.

Components of the Decision

The National Forest Management Act (1976) and Forest Service implementing regulations at 36 CFR Part 219 outline the components of decisions in a Land and Resource Management Plan (forest plan). A forest plan establishes a framework for future decision making by outlining a broad, interdisciplinary program for achieving the desired conditions of the National Forest. A forest plan does not make a commitment to the selection of any specific project and does not dictate day-to-day administrative activities needed to carry on the Forest Service's internal operations. However, a forest plan is implemented through the design, execution, and monitoring of site-specific activities that are consistent with the forest plan.

The decisions I am making in this Record of Decision for the revised Coconino NF Land and Resource Management Plan are:

Establishment of forest-wide multiple-use goals (characterized by desired conditions) and objectives (1982 Rule, Section 219.11 (b))

Chapter 2 of the revised plan outlines forest-wide goals, termed as "desired conditions". While the revised plan addresses all uses and values of the Forest, the desired conditions emphasize: 1) providing for sustainable uses that honor the Forest's human history, while meeting current demands; 2) restoring Ponderosa Pine and Mixed Conifer with Frequent Fire ERUs (using a framework for ecosystem restoration synthesized in GTR-310 by Reynolds et al. (2013)) and grasslands to reduce the risk of uncharacteristic fire and improve ecological resilience in light of Forest susceptibility and resiliency to historically uncharacteristic environmental disturbances (e.g., extreme weather fluctuations or variability, fire, drought, insects, and disease); and 3) promoting aspen and protecting natural waters, which are important centers of biological diversity.

Chapter 2 also establishes objectives, which provide ways of achieving the desired conditions through specific actions for a full array of resources, uses, goods, and services.

Chapter 3 establishes desired conditions and objectives for the Management Areas and Special Areas described above.

Establishment of forest-wide management requirements (standards & guidelines) (1982 Rule, Section 219.27)

Chapter 2 describes the revised plan's forest-wide standards and guidelines. Standards are limitations on actions or thresholds that are not to be exceeded. Guidelines are requirements that must be followed unless a different management action demonstrably achieves the same intent as the guideline. After careful review, I believe that the standards and guidelines provide sufficient requirements for management, provide for resource protection, and reflect the intent of the revised plan. The revised plan strives to not duplicate laws, policies, Forest Service Manual, and Forest Service Handbook direction or other regional directives, in order to simplify the planning document and to keep it up to date. Many of these authorities are incorporated by reference from the original source in Appendix D of the revised plan.

Establishment of management prescriptions and associated standards & guidelines (1982 Rule, Section 219.11 (c))

In addition to plan components that apply across the entire Coconino NF, the revised plan also provides area-specific management direction that differs from the general forest. Chapter 3 describes area-specific direction and is divided into two types: management areas and special areas. Mapping of both management areas and the special areas are in Appendix A. The revised plan provides desired conditions, objectives, standards and guidelines for 18 management areas on the Forest. The revised plan also provides plan components for the following special areas: designated and recommended wilderness areas, designated and eligible wild and scenic rivers, national trails, scenic roads, established and proposed research natural areas, designated botanical and geological areas, and inventoried roadless areas.

Delineation of management areas aids in management and provide plan direction for specific sites. Management areas established in the revised plan are Painted Desert, Volcanic Woodlands, Pine Belt, San Francisco Peaks, Inner Basin, Flagstaff Neighborwoods, Mount Elden, Walnut Canyon, Anderson Mesa, Lake Mary Watersheds, Red Rock, Oak Creek, House Mountain-Lowlands, Sedona Neighborwoods, Verde Valley, Long Valley, East Clear Creek and C.C. Cragin Watersheds.

Special areas are lands given special designation through statute or a preexisting administrative process due to their unique or special characteristics. The special areas on the Coconino NF under the revised plan are listed in table 1 by type of area.

Table 1. Special Areas Addressed in Revised Plan for the Coconino National Forest

Special Area Type	Special Area Name	
Designated	Fossil Creek, Kachina Peaks, Munds Mountain, Red Rock-Secret Mountain,	
Wilderness Areas	Strawberry Crater, Sycamore Canyon, West Clear Creek, and Wet Beaver	

Special Area Type	Special Area Name		
Recommended Wilderness Areas	Abineau, Davey's, and Strawberry Crater		
Designated Wild and Scenic Rivers	Fossil Creek and Verde River		
Eligible Wild and Scenic Rivers	Barbershop Canyon, East Clear Creek, Leonard Canyon, Oak Creek, West Fork of Oak Creek, Sycamore Creek, Upper Verde River, West Clear Creek, and Wet Beaver Creek		
National Trails	Arizona National Scenic Trail, the General George Crook National Recreation Trail, and the Wilson Mountain National Recreation Trail		
Scenic Roads	National Scenic Byways: Historic Route 66 All-American Road and Red Rock All-American Road		
	State Scenic Roads: Dry Creek Scenic Road, San Francisco Peaks Scenic Road, and Sedona-Oak Creek Scenic Road		
	State Historic Roads: Historic Route 66		
Established Research Natural Areas	Casner Canyon, G. A. Pearson, Oak Creek, and San Francisco Peaks		
Proposed Research Natural Areas	West Clear Creek, Rocky Gulch, and expanded San Francisco Peaks		
Designated Botanical	Fossil Springs, Mogollon Rim, and Verde Valley Botanical Areas		
and Geological Areas	Red Mountain Geological Area		
	Cottonwood Basin Geological and Botanical Area		
Inventoried Roadless Areas	Barbershop Canyon, Boulder Canyon, Cimarron Hills, East Clear Creek, Hackberry, Jacks Canyon, Lower Jacks Canyon, Padre Canyon, and Walker Mountain		

Assignment of land within the Coconino NF is to only one management area, but may have several overlapping special areas. For example, the Verde Valley Botanical Area and the Davey's Recommended Wilderness Area are nested within the Verde Valley Management. In such cases, the most restrictive plan direction, including forest-wide plan direction, would apply to the area of overlap.

Determination of land that is suitable for timber production (1982 Rule, Section 219.14) and establishment of the allowable sale quantity (ASQ) of timber (1982 Rule, Section 219.16)

Chapter 4 describes the analysis and discussion of lands suitable for timber. For this revised plan, 522,174 acres of land on the Coconino NF are designated suitable for timber production.

For this revised plan, the Allowable Sale Quantity (ASQ) is 196,809 CCF (hundred cubic feet) (or 112,462 MBF (thousand board feet)), up from 175,723 CCF (100,413 MBF) under the 1987 plan. The ASQ is the amount of wood estimated to be available for sale from the suitable land within the plan area for the first decade of plan implementation. The ASQ is better described as the "average allowable sale quantity" because it may be exceeded in a given year as long as the 10-year average is not exceeded. The ASQ is higher under the revised plan because it provides more acres of lands suitable for timber

production and those additional lands are overstocked. More information on timber suitability and ASQ is available in the Forest Products section and Appendix G of the Final EIS.

Recommendations for non-wilderness allocations and recommendations for wilderness status (1982 Rule, Section 219.17)

During the planning process, the Coconino NF analyzed and evaluated 93,811 acres for designation as potential wilderness. I recommend the 8,733 acres identified in the Recommended Wilderness section in Chapter 3 of the revised plan for Congressional designation as Wilderness. These recommended wilderness areas include Abineau (an addition to the Kachina Peaks Wilderness), Davey's (an addition to the Fossil Springs Wilderness), and Strawberry Crater (an addition to the Strawberry Crater Wilderness). These recommended areas all have high wilderness characteristics and are adjacent to existing wilderness, which would provide for better manageability of the existing wilderness.

The Abineau Recommended Wilderness (415 acres) is recommended for wilderness designation because it has high wilderness characteristics, it has few constraints on wilderness management, and it enhances opportunities for solitude in the neighboring Kachina Peaks Wilderness. The primitive setting would also benefit a variety of species and would promote biodiversity. This would include the increased protection of aspen groves and the habitats for Mexican spotted owls (threatened), northern goshawks (sensitive), black bear, turkey, and blue grouse.

The Davey's Recommended Wilderness (1,739 acres) is recommended for wilderness designation because it has high wilderness characteristics, it has few constraints on wilderness management, it provides challenging wilderness opportunities, and it increases the remoteness and enhances opportunities for solitude in the neighboring Fossil Springs Wilderness. The primitive setting would promote biodiversity and would benefit a variety of species, including Fossil spring snail, spikedace (endangered), loach minnow (endangered), razorback sucker (endangered), Gila topminnow (endangered), roundtail chub, headwater chub, longfin dace, desert sucker, and Sonora sucker. The area would also protect the habitats for a few unique and rare plants and animals, including nesting black hawk and the potential habitat for western yellow-billed cuckoo (threatened).

The Strawberry Crater Recommended Wilderness (6,579 acres) is recommended for wilderness designation because it has high wilderness characteristics, it has few constraints on wilderness management, and it increases the remoteness and enhances opportunities for solitude in the neighboring Strawberry Crater Wilderness. The primitive setting would benefit and protect a variety of cultural resources and species, including the Sunset Crater penstemon (Penstemon clutei), a Southwestern Region sensitive species, and pronghorn.

This recommendation is a preliminary administrative recommendation that will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States. Congress has reserved the authority to make final decisions on wilderness designation. Until Congress considers this recommendation, the revised plan has management direction for these areas to improve and/or maintain wilderness characteristics.

Of the potential wilderness areas considered, but not recommended for wilderness designation, over 50,000 of the acres are within inventoried roadless areas (IRAs) and would be managed to maintain their overall roadless character. Another 11,000 acres of the potential wilderness areas not recommended for wilderness designation would be managed as semi-primitive non-motorized areas with limited motorized access. The revised plan components for these areas will help retain their recreation and scenery settings.

Recommendations for wild and scenic rivers or other special use designations as appropriate (1982 Rule, Section 219.17)

No new rivers or river segments were deemed eligible for inclusion in the National Wild and Scenic Rivers System during the review process for Wild and Scenic Rivers. The Coconino NF reviewed 10 of the segments of streams listed since 1993 as eligible for classification in the Nationwide Rivers Inventory. The Prescott NF reviewed the eligibility of segment 4 of the Upper Verde River, which serves as the boundary between the Coconino NF and the Prescott NF. No changes were made to the classification determinations or the eligibility status of those 11 segments, which total 167.6 miles. The Coconino NF also conducted a supplementary assessment of the 1993 inventory to determine if there are additional rivers or river segments that may be eligible given changed circumstances and/or new information that has occurred since the 1993 inventory was completed. No new river segments were identified on the Forest because there are no changed circumstances or conditions necessitating additional consideration of rivers since 1993. Chapter 3 details more information on the eligible wild and scenic river segments and the applicable management direction in the Designated and Eligible Wild and Scenic Rivers section.

The revised plan also provides management direction for other designated areas established through statute or a preexisting administrative process because of their unique or special character and/or characteristics. These areas include: designated wilderness, recommended wilderness, national trails, scenic roads, established and proposed research natural areas, designated botanical and geological areas, and inventoried roadless areas.

Designation of lands suitable for grazing and browsing (1982 Rule, Section 219.20)

Over 1.6 million acres (approximately 87 percent) of the Coconino NF is suitable for livestock grazing. The areas designated unsuitable for grazing were either closed to grazing prior to the 1987 plan, at the time of the approval of the 1987 plan or have been closed to grazing based on site-specific NEPA decisions for grazing allotments. The identification of lands suitable for livestock grazing within a forest plan is not a decision to authorize livestock grazing. The final decision to authorize livestock grazing would be made at a project (individual grazing allotment) level. On a site-specific basis, grazing allotments are guided by an adaptive management strategy whereby results from long- and short-term monitoring determines yearly stocking rates, pasture rotations, and whether other adjustments are needed to meet management objectives and desired conditions for rangelands. Chapter 4 of the revised plan and Appendix C of the Final EIS contain more information about the grazing suitability and capability determinations on the Forest.

Establishment of monitoring and evaluation requirements (1982 Rule, Section 219.11 (d))

Chapter 5 details monitoring and evaluation requirements, identifying specific monitoring questions regarding achievement of desired conditions and objectives, or meeting regulatory requirements. The monitoring plan strives to be realistic in terms of budget and capacity, and will facilitate adapting management in response to results and new information. Application of this monitoring plan will inform achievement of the desired conditions and objectives, and serve as the basis for adjusting the land management plan.

Determination of lands administratively available for oil and gas leasing (36 CFR 228.102 (d))

This determination is not a part of the revised plan.

Rationale for Decision

My decision to select Alternative B (modified) as the revised Coconino NF Land and Resource Management Plan is based on a careful and reasoned comparison of the environmental consequences of and responses to issues and concerns for each alternative. I selected Alternative B (modified) because it represents the best mix and balance of management strategies that: 1) are responsive to the issues, concerns, and opportunities expressed by State, local and tribal governments, the public, and other Federal agencies; 2) meet the purpose of and need for action by addressing the priority needs for change and major themes that drove plan revision; 3) provide the direction necessary for moving the Forest's resources toward desired conditions while including measures to protect sensitive ecological and cultural elements of the Forest; 4) manage land uses in ways that are socially and economically sustainable; and 5) establish ambitious but achievable objectives for ecosystem restoration and maintenance and recreation opportunities and management.

Alternative B (modified) will effectively maintain or move vegetation toward desired conditions. Alternative B (modified) provides direction to: restore forests, woodlands, grasslands, riparian areas, and chaparral; maintain or establish well-distributed occurrences of old growth; reestablish native species understory; and regenerate aspen. Analysis shows the ecological composition, structure, and processes of the Forest's vegetation types would be closer to reference conditions, allowing the reestablishment of natural patterns and processes within vegetation communities that allow for natural resiliency. Resiliency is especially important when faced with uncharacteristic wildfire, presence of invasive species, increasing human activities, and Forest susceptibility and resiliency to historically uncharacteristic environmental disturbances (e.g., extreme weather fluctuations or variability, fire, drought, insects, and disease).

Contributing to Social and Economic Sustainability

Alternative B (modified) provides for the highest level of social and economic sustainability. Analysis in the Final EIS shows that Alternative B (modified) will contribute to social and economic sustainability. It

Record of Decision for the Coconino National Forest Land and Resource Management Plan

is expected to produce over 5,500 jobs and \$212 million in labor income for the local economy, mostly generated through the recreation, wood products program, and livestock grazing.

The level of landscape-scale forest restoration that is needed can only occur if there are markets for the wood removed in mechanical thinning. Alternative B (modified) designates 522,174 acres of suitable timberlands, tied for the most suitable timberland of any of the alternatives. Through management on a regulated basis with planned, scheduled entries, these suitable timberlands will yield an annual average of 196,809 CCF (112,462 MBF) of commercial sawtimber and pulp, up from 175,723 CCF (100,413 MBF) under the 1987 plan. This would provide a greater incentive for forest products industry to make investments in wood utilization infrastructure.

In addition to the commercial sawtimber and pulp generated on suitable timberlands through planned, scheduled entries, additional wood products would be available to local markets from suitable timberlands and through tree cutting for purposes such as restoration, safety, firewood, and biomass on non-suitable lands. This steady and sustainable flow of wood will provide a supply of forest products that will encourage investment in local wood utilization infrastructure. Alternative B (modified) provides a pathway forward for the Forest, tribes, and industry to build a critical mass of capacity, labor, and supply to support an effort like 4FRI (discussed briefly above in the Forest Setting section).

Alternative B (modified) also does the best job of protecting communities, infrastructure, heritage resources, and recreational settings from severe wildfires. It more effectively provides for firefighter safety because more fires will burn as low intensity surface fires, allowing for direct attack.

Promoting Healthy Watersheds

The revised plan carries forward the Forest Service's commitment to manage for healthy watersheds to benefit communities. Major watersheds on the Coconino NF include: the Inner Basin of the San Francisco Peaks (1,057 acres) and the Lake Mary watersheds (51,260 acres), which supply water for the City of Flagstaff; the watersheds surrounding C.C. Cragin Reservoir (45,711 acres), which provide water for the Town of Payson and other communities in northern Gila County; and nearly 1,500 square miles of watersheds that support the Verde River, which provides water for the Phoenix metropolitan area. Furthermore, Alternative B (modified) emphasizes the importance of these areas by identifying them as management areas with direction that focuses on water supply, the maintenance of water quality, groundwater recharge, precipitation infiltration, and lowering the risk of uncharacteristic fire. This focus will reinforce the current work by partners implementing the Flagstaff Watershed Protection Project (discussed briefly in the Forest Setting section).

Alternative B (modified) promotes healthy watersheds through desired conditions, standards, and guidelines that protect and improve soil, water resources, riparian areas, and upland vegetation conditions. Alternative B (modified) prioritizes treatments in priority watersheds.

It also includes objectives that envision over 460,000 acres of mechanized and prescribed and naturally-ignited wildland fire treatments across the Forest (including 400,000 acres in the Ponderosa Pine and Mixed Conifer with Frequent Fire Ecological Response Units) in the next 10 years to improve soil quality, reduce tree density, restore natural fire regimes, promote high quality habitat and healthy ecosystems, reduce fire hazard, provide forest products, and promote resiliency to uncharacteristic

disturbance. Water quality is expected to trend toward desired conditions and water yield may increase because of implementation of ecological restoration treatments that result in improved soil quality and more open forests, woodland, and grassland conditions. Analysis shows that soil conditions under Alternative B (modified) would remain static or improve over the planning period and Alternative B (modified) would provide the best opportunity for restoring or maintaining watersheds across the Forest. Restoration to, and maintenance of, desired conditions in forested vegetation types will result in increased water yields for important watersheds which supply agricultural and urban areas of Arizona and recharge groundwater. Alternative B (modified) is expected to result in a positive trend for riparian areas, based on the overall focus on ecosystem restoration and resiliency, in addition to specific objectives to treat riparian areas and remove motorized routes impacting riparian condition.

Restoring Vegetation to Historic and Resilient Condition

Alternative B (modified) consistently addresses the same issues as 4FRI (USDA Forest Service 2015³), which provides for mechanical and prescribed fire treatments to restore frequent-fire ecosystems at landscape scale, reduces the incidence of uncharacteristic wildfires, and produces economic benefits for communities. In the next 10 years, plan objectives for Ponderosa Pine and Mixed Conifer with Frequent Fire Ecological Response Units in the revised plan envision over 275,000 acres of mechanized treatment and nearly 350,000 acres of wildland fire treatments (208,000 acres of prescribed fire treatment, and over 140,000 acres of naturally-ignited wildland fire treatments). Some of the mechanical and wildland fire treatment acres are likely to overlap. Together, these treatments will reduce tree density, restore natural fire regimes, promote high quality habitat and healthy ecosystems, reduce fire hazard, provide forest products, and promote resiliency to uncharacteristic disturbance. To achieve this level of treatment, the Forest will rely heavily on projects developed under 4FRI, such as the C.C. Cragin Watershed Protection Project.

The desired conditions for the Ponderosa Pine and Mixed Conifer with Frequent Fire ERUs use a framework for ecosystem restoration based on decades of ecological research (synthesized in GTR-310, Reynolds et al. 2013), which will move these frequent-fire adapted systems toward increased resiliency by restoring spatial arrangement, structure, and species composition of vegetation. The timber program will be a major part of these restoration efforts on the Coconino NF in the coming years, which would continue to support over 2,000 jobs and generate over \$80 million dollars in labor income, annually.

The revised plan provides direction for the improvement of vegetation cover and the health of riparian areas, increasing resiliency to extreme weather events and other uncharacteristic disturbances. The revised plan provides for reduction of uncharacteristic wildfires, increased water yield, and increased economic benefits. Provisions in the revised plan to improve ecosystem health and reduce the risk of uncharacteristic wildfire will in turn result in fewer opportunities for epidemic-level outbreaks of insects and diseases and invasion of exotic species, as well as specific direction to control and eradicate exotic invasive species.

³ U.S. Department of Agriculture (USDA), Forest Service. 2015. Final Environmental Impact Statement for the Four-Forest Restoration Initiative with errata and objection resolution modifications. USDA Forest Service, Southwestern Region. Albuquerque, NM. 575 pp.

Managing Wildland Fire

Alternative B (modified) uses a combination of mechanical and wildland fire treatments (see the acres expected to be treated described in the section above) to maintain or move vegetation toward desired conditions. Mechanical treatments of Ponderosa Pine and Mixed Conifer with Frequent Fire ERUs are expected to result in a sustainable flow of wood products to local and regional industry. The use of wildland fire (prescribed and naturally-ignited) treatments of Ponderosa Pine and Mixed Conifer with Frequent Fire ERUs would assist in restoring fire to a more natural role and provide an economical alternative to mechanized thinning.

My decision provides land managers more opportunities to manage wildfire in designated wilderness and wildland-urban interface to protect communities and meet plan restoration objectives. Analysis shows that Alternative B (modified) would reduce the risk of uncharacteristic wildfire and the resulting threat to communities and ecosystems, and potential losses from fire. Treatments within the wildland-urban interface would help protect communities and protect the Forest from fire that starts on private lands. These treatments would also benefit firefighter and public safety.

Providing for Traditional and Cultural Uses

Alternative B (modified) recognizes the cultural and economic role of domestic livestock grazing. The guidance in the revised plan provides for the continuation of grazing on the Coconino NF at current levels, approximately 128,000 head months annually. The grazing program on the Coconino NF would continue to support over 300 jobs and generate over \$5 million dollars in labor income, annually. The revised plan also includes comprehensive direction for collection and use of forest products, with specific direction for products of tribal interest. Firewood collection would continue under the personal permit system.

Preserving Open Space Protections

Alternative B (modified) protects open space on the Coconino NF in general by taking open space and natural resource values into consideration when responding to land exchange proposals. Collaboration and partnerships are encouraged to address open space concerns. This alternative also carries forward standards from the 1987 plan that prohibit or severely limit disposal of National Forest System lands in the Walnut Canyon, Oak Creek Canyon, Red Rock, Sedona Neighborwoods, and House Mountain – Lowlands management areas. Accordingly, the protections afforded to these areas in the past will continue into the future under the revised plan.

Providing and Managing Recreation Opportunities

Alternative B (modified) provides a mix of recreation opportunities with a balanced approach in providing developed, dispersed, motorized, and non-motorized recreation opportunities. The recreation program on the Coconino NF would continue to support over 2,600 jobs and generate nearly \$99 million dollars in labor income, annually. Alternative B (modified) emphasizes maintenance of existing recreation developments with limited new development.

Providing for Reasonable Motorized Access

Alternative B (modified) provides the framework through desired conditions, objectives, standards, and guidelines for reasonable motorized access on the Coconino NF for the public, and for permitted and administrative purposes. The current road system includes over 3,900 miles of road open to the public and an additional 2,300 miles of road available for limited administrative and permitted uses. Over 95 percent of the Forest (outside of designated wilderness areas) is within one mile of the roads open to the public. Alternative B (modified) includes a desired condition that provides for a system of roads that is needed and desired by the broad array of users of the Forest and one that expands and contracts according to those uses. Alternative B (modified) also includes a standard that requires motor vehicle use to occur as identified on the Forest's motor vehicle use maps, but recognizes that there are exceptions for uses authorized by law, permits, and orders in connection with resource management and public safety. Through these components, Alternative B (modified) provides management for motorized access both on and off designated routes. This framework ensures that the Forest will be able to meet reasonable needs for motorized access. Any changes to the current road system will be determined based on project-level analysis and decisions under the Travel Management Rule (36 CFR § 212) and its associated NEPA environmental effects analysis, as required by Executive Order 11644.

Establishing Suitability for Recreation and Transportation

Alternative B (modified) establishes suitability determinations for recreation and transportation. These suitability determinations will help guide decisions in the future and ensure that recreation and transportation on the Forest are compatible with other management in the plan area. For example, Alternative B (modified) provides the framework to guide future changes to the transportation system. Specifically, the revised plan identifies the suitability of areas for various forms of transportation, including motorized travel. Under the revised plan, less than 3 miles of road open to the public would fall within areas determined to be not suitable for motorized travel; those areas have a Recreation Opportunity Spectrum of semi-primitive non-motorized or primitive. Restrictions on motorized travel in areas deemed to be unsuitable will be determined in the future based on project-level analysis and decisions under the Travel Management Rule (36 CFR § 212) and its associated NEPA environmental effects analysis, as required by Executive Order 11644. The Motor Vehicle Use Map (MVUM) prepared under the Travel Management Rule documents these project-level decisions and displays where motorized travel is allowed. Any proposed future site-specific changes to the Forest's transportation system will be evaluated in annual NEPA-based adjustments to the MVUM, accomplished under the framework of the revised plan's suitability determinations and other plan guidance.

Recommending Wilderness

Alternative B (modified) includes three recommended wilderness areas that meet the wilderness inventory criteria, totaling about 8,733 acres. The Abineau Recommended Wilderness is 415 acres and adjoins the Kachina Peaks Wilderness. The Davey's Recommended Wilderness is 1,739 acres and adjoins the Fossil Springs Wilderness. The Strawberry Crater Recommended Wilderness is 6,579 acres and adjoins the Strawberry Crater Wilderness. The Forest has 156,374 acres of designated wilderness, which is 8.5 percent of the Forest. These recommendations, if designated by Congress, would increase the designated wilderness on the Forest to 165,107 acres, which would be, 9 percent of the Forest.

I believe these recommended wilderness areas would make valuable additions to the National Wilderness Preservation System because of their high wilderness characteristics, few constraints on wilderness management, and enhanced opportunities for solitude in the neighboring designated wilderness area. Additional information on the resources and species in each of these recommended wilderness areas that would benefit from wilderness designation is included above in the section entitled Recommendations for non-wilderness allocations and recommendations for wilderness status (1982 Rule, Section 219.17).

Providing Research Natural Areas

Alternative B (modified) recommends three research natural areas totaling approximately 2,074 acres. These areas provide representation in three ecological types that will broaden ecological diversity of the regional network of research natural areas. The 1,007-acre West Clear Creek proposed RNA is an example of riparian communities associated with hanging gardens and springs in a steep canyon setting. The 926-acre Rocky Gulch proposed RNA is an example of old-growth ponderosa pine, and it is a control for research in the Beaver Creek watershed. The 141-acre proposed expansion to the east side of the San Francisco Peaks RNA is an example of alpine tundra, a rare feature in the Southwestern Region. These additions will provide additional opportunities for research, observation, and study.

Establishing Cottonwood Basin Geological and Botanical Area

Alternative B (modified) establishes the Cottonwood Basin Geological and Botanical Area totaling approximately 763 acres. This area preserves cone-shaped geological formations that developed from physical and chemical weathering of fumeroles (old gas vents) in an 8 million year old volcanic ash deposit. This area also preserves extraordinary botanical diversity in the semi-desert grassland that is associated with the volcanic ash deposit.

How the Modified Proposed Action Compares to Other Alternatives

I selected Alternative B (modified) rather than Alternative A because Alternative A does not address the needs for change identified in the Analysis of the Management Situation. The 1987 plan has no articulated desired conditions for grasslands, wetlands, springs, traditional cultural use, or air quality. There are very few desired conditions for other resources. After reviewing the Final EIS and summary in Table 2 of the Final EIS, it is clear to me that Alternative A is generally the poorest of all the alternatives in terms of its ability to achieve desired conditions. Furthermore, Alternative A does little to recognize or provide management direction for many of the special areas on the Coconino NF.

I selected Alternative B (modified) rather than Alternative C for several reasons. Alternative C includes elements that would be overly restrictive on the need to restore vegetation communities on the Forest. Alternative C carries forward the old growth management provisions from the 1987 plan, as amended in 1996. In ponderosa pine and mixed conifer forests, the emphasis under the 1987 plan is placed on creating and maintaining large stands (100 to 300 acres) or large aggregations of contiguous stands that all have the full suite of old-growth characteristics. Generally, within the ponderosa pine and mixed conifer forests, the 1987 plan direction would encourage a forest structure that does not match the historic condition or the desired conditions. Larger areas with a closed canopy and a more even-aged structure would occur across the landscape. This structure is not supported by the best available science specific to southwestern frequent fire forests (Reynolds et al. 2013).

Alternative C would also establish eight management areas that emphasize reduced human-related disturbance. One of the initial purposes of these management areas was to reduce motorized disturbance to wildlife. I received numerous comments during the 90-day comment period on the Draft EIS and draft revised plan questioning the propriety of that purpose and the process used to develop these management areas. After review of these comments, I agreed that the general restriction of motor vehicles was not always beneficial to wildlife or wildlife habitat. Accordingly, "wildlife" was removed from the name of these eight management areas, but the direction was retained in Alternative C. I did not select these management areas because they are overly broad and restrictive. The forest-wide plan components, travel management direction, and Recreation Opportunity Spectrum classifications associated with Alternative B (modified) provide comprehensive guidance for managing human-related disturbance. The eight management areas add little in the way of ecological benefits and would unnecessarily impede forest management and public access compared to Alternative B (modified).

I selected Alternative B (modified) rather than Alternative D for several reasons. Alternative D does not recommend any new wilderness areas and would only designate the geological portion of the Cottonwood Basin as a special area. Alternative B (modified) provides acknowledgment and management direction for this small, but valuable area.

Alternative B (modified) recommends approximately 8,733 acres for wilderness designation, while Alternative C would recommend about 91,757 acres. Alternatives A and D would not recommend any new wilderness areas. The three recommended wilderness areas in Alternative B (modified) possess the highest degree of wilderness characteristics, and are adjacent to existing wilderness. The 10 additional recommended wilderness areas included in Alternative C possess a lower degree of wilderness characteristics, some of which have management needs that would be more difficult to address without mechanical or motorized means. Additionally, a majority of the 10 additional recommended wilderness areas in Alternative C are already designated as inventoried roadless areas and protected by the management direction included in the 2001 Roadless Rule. For these reasons, I am not currently choosing to recommend any of the 10 additional areas included in Alternative C.

The revised plan is responsive to the Forest Service's National Strategic Plan (2015-2020) and meets our legal obligations to the people and environment that surrounds them. The full implementation rate for the revised plan could require higher funding levels in some areas than those currently allocated; however, I believe the management direction changes envisioned in the revised plan are attainable under current budget levels. The achievement of desired conditions and outputs in some areas, however, may be prolonged or reduced if future budgets decrease or if wood processing infrastructure is not available within a feasible distance.

In summary, I believe Alternative B (modified) sets the framework for future decisions better than the other alternatives because it best addresses the needs for change to the 1987 plan. It is overall best in achieving desired conditions and therefore best provides for social, economic, and ecological sustainability on the Coconino NF.

My conclusion is based on a review of the record that shows thorough incorporation of relevant scientific information, a consideration of opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

Response to Public Concerns

Many partners and stakeholders shared their concerns and preferences during the collaboration and public involvement for the Coconino NF Land and Resource Management Plan revision. The public involvement process and some of the public comments received over the course of that public involvement are discussed above in the Public Involvement section. Early public involvement helped develop the drafts of the proposed revised plan that were shared with the public in 2010, 2011, and 2013 along with the Draft EIS.

I have made my decision to select Alternative B (modified) with due consideration of the input from those partners and diverse stakeholders. I will now share my views regarding some of the key public concerns expressed on the Coconino NF's Land and Resource Management Plan over the course of this plan revision effort and how my decision responds to those concerns. Additional information is available in Appendix D of the Final EIS, which comprehensively responds to all the comments that I received during the 90-day comment period on the Draft EIS and the draft revised plan that accompanied it.

C.C. Cragin Reservoir as designated Municipal Watershed – The Town of Payson requested that I designate the C.C. Cragin Reservoir as a municipal watershed. Although my decision does not designate the reservoir as a municipal watershed, the revised plan was adjusted in response to this comment. A separate management area was created for the C.C. Cragin watersheds. Separate management areas were also made for the Inner Basin and Lake Mary watersheds, which also serve as municipal water supplies. These management areas include desired conditions that promote a low risk of substantial damage from uncharacteristic fire and recreation to water supply, infrastructure, and water quality. The Lake Mary Watersheds and C.C. Cragin Watersheds Management Areas include guidelines that would reduce the threat of uncharacteristic wildfires, flooding, and sedimentation to maintain water quality and quantity, and would maintain roads and trails to prevent erosion and sedimentation and to protect existing infrastructure. These management areas are considered part of the wildland-urban interface. A desired condition in Wildland-urban Interface would protect property and reduce fire hazard, intensity, and severity to water supply and infrastructure.

Eliminate Livestock Grazing - The Friends of Anderson Mesa and other stakeholders commented that they wanted the Coconino NF to eliminate or reduce livestock grazing. Alternatives to eliminate, reduce, or increase livestock grazing were considered in the Final EIS but eliminated from detailed study. Imposing a unilateral prohibition on livestock grazing may not meet the legal direction of the National Forest Management Act (NFMA) or Multiple-Use Sustained Yield Act (MUSYA), which direct that forests will be managed using multiple use, sustained yield principles. Furthermore, agency policy exists for determining permitted levels of livestock grazing on the forest. Decisions on stocking levels (the number of livestock authorized to graze in an allotment) are made at the project level, not the programmatic level, based on the conditions that are present in the project area. My decision recognizes livestock grazing as an appropriate activity on the Coconino NF, which contributes to the social, economic, and cultural diversity and stability of nearby rural communities.

The Sierra Club, the Center for Biological Diversity, and other stakeholders questioned the adequacy of plan direction to manage impacts of livestock grazing on water, soil, and vegetation resources. My decision contains numerous desired conditions for the water, soil, and vegetation resources on the

Coconino NF, as well as a guideline for managing livestock grazing to meet or move towards those desired conditions. My decision also contains a guideline to balance livestock grazing with available forage. The grazing program on the Coconino NF has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions.

Range Capability and Suitability – The Sierra Club, the Friends of Anderson Mesa, the Center for Biological Diversity, and other stakeholders questioned the range capability and suitability determinations. The Forest has conducted a grazing capability and suitability analysis for this plan revision effort in compliance with the National Forest Management Act. The process for identifying the lands not suitable for livestock grazing is described in the section titled Determination of Lands Suitable for Livestock Grazing in the Livestock Grazing section in appendix C of the Final EIS. Through this process, the Forest determined that there are 1,308,276 acres on the Forest that are potentially capable and suitable for livestock grazing.

Timber Suitability - The Center for Biological Diversity requested that the timber suitability determination be conducted in compliance with the National Forest Management Act. The timber suitability determination was conducted in compliance with the provisions of the 1982 Planning Rule and Southwestern Region planning direction, which are consistent with NFMA. The Coconino NF suitability determination is based on land availability, capability, operability, management area objectives and requirements, and the economic feasibility of the land. Considering these factors, the Forest determined that there are 522,174 acres on the Forest that are suitable for timber production. The Forest Products section and Appendix G of the Final EIS includes additional information on the Timber Suitability Calculation.

Motorized Access - Many stakeholders and partners voiced concerns about motor vehicle use on the Forest. Some requested that roads and trails be evaluated for addition or removal during the plan revision process. The Arizona Game and Fish Department and Arizona Public Service expressed concern over the objective to decommission 200 to 800 miles of road and requested clarification. The Arizona Elk Society and Arizona Game and Fish Department requested that the revised plan provide guidance for travel management planning (TMR) for cross-country travel associated with wildlife management, dispersed camping, big game retrieval, firewood collection, and dispersed shooting. Recommendations for new wilderness areas and applying non-motorized Recreation Opportunity Spectrum classes to other areas were viewed as objectionable consequences for cross-country travel by the Arizona Game and Fish Department, Arizona Sportsmen for Wildlife Conservation, and other commenters.

My decision provides the framework through desired conditions, objectives, standards, and guidelines for motorized uses and the TMR process on the Coconino NF. To address the concerns on the objective to decommission roads, the objective was adjusted to clarify that the roads that would be decommissioned would be unauthorized roads and system roads not identified on the motor vehicle use map. This clarification was incorporated to allay concerns that there would be reductions in public motorized access due to the objective. My decision includes modest recommendations for new wilderness areas totaling 8,733 acres, which balances the protection of areas with high wilderness characteristics with the need to access and more aggressively manage portions of the Forest. Eleven percent of the Forest would be in the semi-primitive non-motorized Recreation Opportunity Spectrum class and less than one percent would be recommended for wilderness designation, but this would not serve as an outright prohibition to limited

Record of Decision for the Coconino National Forest Land and Resource Management Plan

motor vehicle use for administrative or permitted uses, such as range and wildlife management or big game retrieval, in these areas.

Some stakeholders, including the Arizona Game and Fish Department and the Arizona Elk Society, have expressed concern about changes in the Recreation Opportunity Spectrum (ROS) classifications under the revised plan. These commenters note that the semi-primitive non-motorized (SPNM) ROS class increased from nearly 73,000 acres (4 percent of the Forest) under the 1987 plan to over 206,000 acres (11 percent of the Forest) under the revised plan. The Department is concerned that this increase in the SPNM ROS class will limit motor vehicle use now and in the future.

I recognize that the travel management process has curtailed motorized use on the Forest and that these partners and stakeholders are concerned about additional reductions. However, I believe there is little risk that my decision will lead to meaningful reductions in motorized use on the Forest.

First, comparing the 1987 plan ROS and the revised plan values will provide little understanding of how things may change under the revised plan. The 1987 plan ROS values have not been updated to reflect changes in over 30 years of Forest management. To identify current conditions, in 2011 the Forest prepared an inventory of the physical, biological, social, and managerial settings on the Coconino NF and assessed which ROS class best represented these conditions. This inventory identified 320,568 acres (17 percent of the Forest) as having an existing ROS class of semi-primitive non-motorized (SPNM). The action alternatives considered in the Final EIS use this inventory as the basis for the ROS settings, and allow for more reliable comparisons between the current conditions and the action alternatives. Compared to the current conditions identified by the 2011 ROS inventory, the revised plan reduces the area inventoried as SPNM by nearly 114,000 acres (6 percent of the Forest).

Second, there are only two miles of road currently designated for vehicle use in the areas classified semiprimitive non-motorized. A change in designation for these miles under travel management requires completion of a site-specific, project-level analysis.

Third, applying a SPNM ROS class to an area does not create a prohibition on limited motor vehicle use for administrative or permitted uses. Seasonal motorized big game retrieval would remain an option that may be authorized and included on the MVUM through the travel management process.

Facilitation of Hunting Heritage and Wildlife Conservation – The Rocky Mountain Elk Foundation and the Arizona Game and Fish Department suggested that the proposed revised plan marginalized hunting and may not comply with Executive Order 13443. This executive order directs federal agencies to facilitate the expansion and enhancement of hunting opportunities on federal land. In particular, this executive order directs federal agencies to "implement actions that expand and enhance hunting opportunities for the public" and to "work collaboratively with State governments to manage and conserve game species and their habitats." The balance of motorized and non-motorized access struck by the revised plan ensures that the Coconino NF will offer a full range of opportunities and experiences to recreationists, including hunters. For example, the desired transportation system will provide reasonable motorized access to the Coconino NF for hunters who desire or need motorized access to areas where they want to hunt. Likewise, the areas that have a desired Recreation Opportunity Spectrum (ROS) classification of semi-primitive non-motorized (SPNM) will provide opportunities for hunters who seek a different recreation experience. Under either situation, seasonal motorized big game retrieval is an option

that may be authorized and included on the MVUM through the travel management process. This balanced approach improves and enhances hunting opportunities on the Coconino NF by providing an array of motorized and non-motorized opportunities to recreationists.

Retain 1987 Plan Standards in Revised Plan - Several stakeholders, including Keep Sedona Beautiful, Western Watersheds Project, and the Center for Biological Diversity, commented that the revised Plan should retain existing standards from the 1987 plan and include stronger binding standards and guidelines instead of relying on discretionary desired conditions. The revised plan is less prescriptive by design, but much of the direction from the 1987 plan will still be guiding the Forest. For example, many of the 1987 plan standards and guidelines were not carried forward into the revised plan because they duplicated existing law, regulation, or policy. Removing them from the revised plan does not remove the Forest's obligation to comply with those laws, regulations, and policies. However, removing those authorities from the revised plan eliminates the risk that the revised plan will include outdated requirements if those laws, regulations, and policies are revised.

To demonstrate if and how plan components from the 1987 plan were incorporated into the revised plan, Appendix I was added to the Final EIS. This appendix includes a crosswalk that shows whether standards, guidelines, and other plan components were retained. If they were retained, the crosswalk indicates where the direction can be found in the revised plan. If components were not retained, the crosswalk provides a rationale for their removal from the revised plan.

These stakeholders are concerned that there is little value to a binding standard or guideline that has been converted to a discretionary desired condition. This belief is, unfortunately, based on a misunderstanding of how desired conditions work under the revised plan. To address this misunderstanding, additional information was added to Chapter 1 of the revised plan to explain that desired conditions are not discretionary. A project or activity approval document must describe how the project or activity is consistent with the revised plan, including its desired conditions. The description of a desired condition in the Plan Decisions section in Chapter 1 of the revised plan describes the options a responsible official has to demonstrate that a project or activity is consistent with the desired conditions in the revised plan. The Future Projects, Program Plans, and Assessments section lists the options that are available to a responsible official when a proposed project or activity would not be consistent with desired conditions or other plan components.

Reclaimed Water and Snowmaking - Some stakeholders, including the Sierra Club and the Center for Biological Diversity, commented that the revised plan lacks direction on the use of reclaimed water and snowmaking on the Forest and requested that these activities be identified as incompatible uses on the Forest. Some commenters questioned whether it was ecologically appropriate and safe to use reclaimed water on the Forest, especially near federally-listed threatened and endangered species. Other commenters questioned whether it was ethical to allow the use of water, a rare resource in the southwest, to make snow.

Other commenters, including members of the Navajo Nation, questioned the propriety of authorizing snowmaking activities at the Arizona Snowbowl, regardless of the water source, on the San Francisco Peaks, an area held as sacred by many tribes in this region. Some of these commenters have suggested that the Forest should use the plan revision effort to reconsider its decision to authorize snowmaking on

Record of Decision for the Coconino National Forest Land and Resource Management Plan

the San Francisco Peaks. I understand how troubling that decision was for the tribes and tribal members that cherish the San Francisco Peaks. I also understand the ongoing controversy over the decision to authorize snowmaking with reclaimed water at the Arizona Snowbowl that is unrelated to tribal interests. I am not revisiting that decision at this time.

I understand the ecological, ethical, and cultural concerns asserted by the tribes and others. With those concerns in mind, my decision does not expressly declare the use of reclaimed water or snowmaking as an incompatible use on the Forest. However, the revised plan contains several components that provide a framework that can be applied to address the concerns about the limited water resources in this region, the federally listed endangered San Francisco Peaks Ragwort, and the San Francisco Peaks Traditional Cultural Property. These components will guide site-specific decisions on whether to authorize the use of reclaimed water or snowmaking on the Forest under the revised plan.

Old Growth – The Sierra Club, Center for Biological Diversity, and others expressed concern that the revised plan does not adequately protect existing and provide for future old growth. Some suggested that the revised plan include the 4FRI stakeholders' "Old Growth Protection and Large Tree Retention Strategy" (OGPLTRS). The EIS evaluated two alternatives (Alternatives A and C) with direction to retain all large and old trees. My decision contains desired conditions and guidelines to sufficiently retain and encourage old growth structure at the landscape, mid-, and fine scales. Under certain stand structure conditions where large trees are more common, my decision allows for removal of some older trees where needed to provide for breaks in the canopy and reduce the risk of stand replacing fire. By doing so, increased protection will be provided to the remaining large trees. I believe my decision best protects and provides for old growth. Furthermore, the OGPLTRS proposed very specific tree retention requirements that are not appropriate for a programmatic land management plan. It reduces the flexibility that project-level decision makers may need to design treatments that promote site-specific desired conditions. Although the OGPLTRS was not incorporated into plan components in the revised plan, concepts from the strategy could be incorporated at the project level where applicable.

More Wilderness or No Wilderness- Some commenters, including the Sierra Club, Center for Biological Diversity, Grand Canyon Wildlands Council, Arizona Wilderness Coalition, Great Old Broads for Wilderness, Keep Sedona Beautiful, and the U.S. Environmental Protection Agency expressed support for more recommended wilderness, while other commenters, including the Arizona Game and Fish Department, Arizona Public Service, Rocky Mountain Elk Foundation, Arizona Elk Society, and Arizona Sportsmen for Wildlife Conservation expressed a preference for less or no additional wilderness. During the planning process, the Coconino NF analyzed and evaluated 93,811 acres across the Forest to identify potential wilderness areas. The EIS studied alternatives that included a wide range of recommended wilderness (0 to 91,757 acres) selected from those potential wilderness areas. My decision considered the needs for active management to decrease the risk of uncharacteristic wildfire and manage other resources within the potential wilderness areas. My decision recommends areas that are adjacent to existing wilderness areas to improve manageability of the Kachina Peaks, Strawberry Crater, and Fossil Springs Wildernesses.

Some stakeholders, including the Sierra Club, Center for Biological Diversity, Grand Canyon Wildlands Council, Arizona Wilderness Coalition, and Great Old Broads for Wilderness, also had questions about the rationale used to select recommended wildernesses in the wilderness evaluation process. These

stakeholders questioned why some potential wilderness areas with the same ratings were included in the proposed action while others were only included in Alternative C. In response to this comment, the Forest revisited the Potential Wilderness Area Evaluation Report. The Coconino NF wilderness evaluation process is consistent with the 1982 planning rule, directives, and regional guidance. This review confirmed that some potential wilderness areas with the same ratings for capability, availability, and need were included in the proposed revised plan, while others were not. After a thorough review of the available information, it was determined that the Walker Mountain potential wilderness area would not be recommended for wilderness designation in the proposed revised plan and the Abineau potential wilderness area that is included in alternative C would be recommended for wilderness designation the proposed revised plan. The Walker Mountain potential wilderness area is recommended for wilderness designation in alternative C. This change put the potential wilderness areas with the highest wilderness characteristics into Alternative B (modified) while retaining those three potential wilderness areas and 10 other potential wilderness areas with more moderate wilderness characteristics in Alternative C. The Final EIS analyzed both of these alternatives. My decision recommends areas with the highest wilderness characteristics for Congressional designation as wilderness.

Designate National Scenic Area - Keep Sedona Beautiful requested that I consider incorporating a designation for a National Scenic Area for approximately 160,000 acres of the Forest surrounding Sedona and Oak Creek Canyon. The agency expressed support for a legislative effort to create such a scenic area in 2012. A central component of that legislative effort would have prevented any land exchanges within the scenic area unless the exchange resulted in the acquisition of other land within the scenic area and there was no net loss of National Forest System land within the scenic area.

A National Scenic Area proposal for the Sedona-Oak Creek area was considered as an alternative, but it was eliminated from detailed study in the environmental impact statement. The 1987 plan had land adjustment limitations very similar to those addressed in the proposed legislation. My decision retains those land adjustment limitation standards for the Sedona-Oak Creek area in the Red Rock, Oak Creek Canyon, Sedona Neighborwoods, and House Mountain-Lowlands management areas in the revised plan. The Sedona-Oak Creek area certainly has exceptional scenery. My decision preserves this scenic resource and keeps the option of pursuing a National Scenic Area designation open in the future.

Walnut Canyon National Monument - The Forest received many comments related to the management of the portions of the Forest surrounding the Walnut Canyon National Monument (located just to the east of Flagstaff). The Sierra Club and others suggested that the Forest should change the boundary of the Walnut Canyon Management Area to match the Walnut Canyon Study Area. Potential management options for the area around Walnut Canyon have been considered under a Congressionally-mandated study. The study has been completed and forwarded to the secretaries of the Department of Agriculture and the Department of Interior for consideration. The study rules out management of the area by the neighboring Walnut Canyon National Monument and presents three options to the secretaries. The Forest is waiting for a recommendation on how to proceed. As to altering the boundary of the management area to match the study area, my decision is to retain the management area boundary. The Walnut Canyon Study Area boundary would be difficult to find on the ground, which would make implementation difficult. The Walnut Canyon Management Area boundary was developed with topographical features and landmarks in mind to make the boundary more locatable on the ground.

Anderson Mesa Special Management Area - The Friends of Anderson Mesa requested that I consider an alternate that would designate the Anderson Mesa Management Area as a special management area. The proposals for a special area that encompasses Anderson Mesa were merged and retained in Alternative C. Although Alternative C does not recommend or designate Anderson Mesa as a "special area," it does include a management area for Anderson Mesa that incorporates the intent of the proposals to give Anderson Mesa some level of special area status. The Anderson Mesa Management Area in Alternative C places additional emphasis on the ecological resources in the area and the preservation of semi-primitive and primitive settings. This management area includes many plan components that are designed to articulate and embody this emphasis.

Beaver Creek Management Area – The Beaver Creek Preservation and Historical Society, the Lake Montezuma Property Owners Association, and others requested that I consider creating a management area for the Beaver Creek area. The Beaver Creek area is located within the Verde Valley Management Area. Rather than create a new Beaver Creek Management Area, my decision includes a Verde Valley Management Area that has been reviewed, edited, and augmented to address concerns related to the management of the Beaver Creek area.

Mount Elden Management Area as Wilderness or Primitive/Semi-Primitive Non-Motorized – One stakeholder requested that the Mount Elden Management Area be considered for wilderness designation or given a Recreation Opportunity Spectrum classification of primitive or semi-primitive non-motorized. The Mount Elden area was considered for wilderness designation as part of the wilderness evaluation process the Forest conducted for the forest plan revision effort. The Mount Elden area was screened out during the inventory step of the evaluation. After boundary adjustments were made for private land, communication towers, Forest Service lookout tower, utility corridors, other special use permits, and associated roads, the area no longer met the 5,000-acre criteria for potential wilderness areas. It was removed from further consideration at that time. The Mount Elden Management Area has not been assigned recreation opportunity spectrum (ROS) settings of primitive or semi-primitive non-motorized as suggested. The ROS modeling conducted for the forest plan revision reflects that less than 10 percent of the management area should have an ROS class of semi-primitive non-motorized and none of the management area should have an ROS class of primitive. Classifying this management area as semi-primitive non-motorized or primitive ROS would create a situation where many existing uses in the area would be inconsistent with the assigned ROS classes.

San Francisco Peaks as a Traditional Cultural Property – One stakeholder requested that I complete the Traditional Cultural Properties designation process for the San Francisco Peaks. The San Francisco Peaks have already been designated as a Traditional Cultural Property. The revised plan acknowledges this designation in the General Description and Background for the San Francisco Peaks Management Area.

Species Viability - Concerns were raised by the Sierra Club and Center for Biological Diversity about the species viability process. The viability analysis is documented in the Final EIS. Wildlife species viability was conducted in accordance with the 1982 Planning Rule to assure the plan (and plan decisions) maintain viable populations of wildlife relative to well-distributed habitat, species occupancy, and maintenance or restoration of habitat. My decision contains protections for the viability of all species

through desired conditions, objectives, standards, and guidelines, including a guideline to follow species recovery plans.

Management Indicator Species - The Sierra Club and Center for Biological Diversity questioned the number of management indicator species (MIS) and the basic concept of MIS. The Coconino NF followed the 1982 Planning Rule requirements for selecting and analyzing effects of MIS; this is also documented in the Final EIS. The role of MIS and the basis for their selection is to estimate the effects of each alternative on wildlife species. These species are also monitored throughout the life of the revised plan to assess the effects of management on their populations and the populations of other species with similar habitat needs. My decision identifies three MIS (Mexican spotted owl, pygmy nuthatch, and pronghorn) that represent vegetation types where extensive restoration objectives are planned. As required by the 2012 Planning Rule, the Coconino NF will identify focal species to include in its new monitoring strategy. The three MIS will be considered along with other species on the Forest for designation as a focal species.

Aerial Noise – Keep Sedona Beautiful, Sierra Club, and others commented that the revised plan lacks guidance and restrictions on noise and disturbances from low-flying aircraft and helicopters. Management of aircraft in flight is generally outside the scope of the Land and Resource Management Plan; the Forest has no authority to limit or manage aircraft or helicopters that do not take off from or land on the Forest. Nonetheless, my decision contains several components that will help reduce noise and disturbances from aircraft and helicopters. The revised plan includes a standard prohibiting motorized aircraft landings and takeoffs on the Forest and a guideline restricting commercial filming by aircraft in the Sedona/Oak Creek area. To help preserve recreational experiences, the revised plan includes a desired condition for natural soundscapes to be consistent with the Recreation Opportunity Spectrum objectives for an area. Finally, a management approach reminds forest managers to collaborate with Federal Aviation Administration, airport administrations, air tour operators, military and government agencies, and other aircraft operators to minimize disturbances caused by aircraft over designated Wilderness areas.

Monitoring of Uncharacteristic Environmental Disturbances Guidance - The Sierra Club, Center for Biological Diversity, Keep Sedona Beautiful, and others requested that the revised plan and its Monitoring Plan have additional guidance associated with Forest susceptibility and resiliency to historically uncharacteristic environmental disturbances (e.g., extreme weather fluctuations or variability, fire, drought, insects, and disease). Regional guidance on susceptibility and resiliency to historically uncharacteristic environmental disturbances was used during plan development. The nature of the revised plan I have selected is to maintain or manage toward desired conditions, regardless of current or changing conditions (e.g., susceptibility and resiliency to historically uncharacteristic environmental disturbances). Furthermore, the revised plan is intended to allow management of the Forest to adapt as necessary to continue moving toward ecological and social desired conditions. Rather than being confined to one section, susceptibility and resiliency to historically uncharacteristic environmental disturbances is addressed in numerous locations in the revised plan. The Monitoring Plan in the revised plan has questions that relate to susceptibility and resiliency to historically uncharacteristic environmental disturbances and it can track the Forest's progress toward desired conditions and whether management activities are promoting resilient ecosystems, as well as provide indications about whether influences of susceptibility and resiliency to historically uncharacteristic environmental disturbances are hindering progress toward desired conditions.

Monitoring Plan Clarity – Northern Arizona University's Landscape Conservation Initiative and Ecological Restoration Institute expressed concerns about the Monitoring Plan in general and requested that it be revised to add clarity and specificity. The Monitoring Strategy was reviewed and modified in response to this concern. Key changes include clarifying the questions, identifying the scale, and having more easily understood metrics that tie to the data sources for each monitoring question. Acronyms were spelled out in place and a footnote was added to provide additional information on the data sources that would be used by the Monitoring Plan.

Ban Lead Ammunition - The Sierra Club and others want the forest to ban the use of lead ammunition on the Forest. The revised plan was not specifically modified to include plan components that prohibit lead ammunition. Instead, the revised plan includes strategic direction on soil and water health that would be applicable if deposits of lead ammunition rose to levels that were impacting forest resources or became a concern from a public health and safety standpoint.

I truly appreciate all the stakeholder's constructive contributions to the development of this revised plan for the Coconino NF. That input has resulted in an improved revised plan that will serve the Forest, its priceless resources, and the public, well into the future.

Environmentally Preferred Alternative

The Council on Environmental Quality has defined the "environmentally preferred" alternative as: "...the alternative that will promote the national environmental policy as expressed in NEPA's section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources."

Alternative B (modified), the proposed action, is the environmentally preferred alternative, but only slightly more than Alternative C. All of the action alternatives facilitate restoration of the structure, composition, and processes of ecosystems and protect and restore rare and unique resources that support important habitats. All of the action alternatives also: ensure the protection of soil and watershed function; provide for threatened, endangered, sensitive, rare, and narrow endemic species; protect historic and cultural resources; and mitigate the effects of Forest susceptibility and resiliency to historically uncharacteristic environmental disturbances (e.g., extreme weather fluctuations or variability, fire, drought, insects, and disease). Alternative B (modified) distinguishes itself on the topic of recommended wilderness areas. Alternative B (modified) recommends three potential wilderness areas with high wilderness character for wilderness designation. Designation of these areas will preserve the high quality biological and physical environment within them. Alternative C would recommend these three potential wilderness areas and 10 more with moderate wilderness characteristics for wilderness designation. Some of the areas with moderate wilderness characteristics are in need of restoration due to decades of interference with the natural fire regime. Designation of the potential wilderness areas in need of restoration is expected to reduce the likelihood of treatment which increases the risk of uncharacteristic fire. Alternative D does not recommend any of the potential wilderness areas for wilderness designation, so it offers less protection for high quality biological and physical environment than Alternative B (modified).

All of the action alternatives use desired conditions for the Ponderosa Pine and Frequent Fire Mixed Conifer Ecological Response Units that are based on decades of ecological research (synthesized in GTR-310, Reynolds et al. 2013). This framework for ecosystem restoration will set these ERUs on a trajectory toward achievement of desired conditions, thereby reducing the risk of uncharacteristic high severity fire. However, the old growth retention direction that is included in Alternative C would encourage a forest structure that does not match the historic condition or the desired conditions. Larger areas with a closed canopy and a more even-aged structure would occur across the landscape. These large blocks would be at a greater risk of loss to disease and uncharacteristic wildfire. Over time, Alternative B (modified) would move these Ecological Response Units closer to reference conditions and more quickly than Alternative C.

Net Public Benefits

The 1982 National Forest Management Act (NFMA) implementing regulations (36 CFR 219.1) state that plans "...shall provide for multiple use and sustained yield of goods and services...in a way that maximizes long term net public benefits..." Section 219.3 defines net public benefits as "...the long term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not. Net public benefits are measured by both quantitative and qualitative criteria rather than a single measure or index."

There are two economic analyses required by the 1982 Rule Provisions—economic impact analysis and financial efficiency analysis. Economic impact analysis estimates the employment and labor income consequences and compares the relative effects of the alternatives. Although the alternatives provide similar levels of employment and income, Alternatives B (modified) and D provide the highest levels. Financial efficiency analysis compares forest expenditures and revenues for the expected life (10 to 15 years) of the forest plan and the efficiency measure is present net value (PNV). PNV is the difference between program revenues and program expenditures over a 10-year period, using a four percent discount rate. Although PNV is negative for all alternatives, Alternatives B (modified) and D have the lowest negative PNV. It is important to note that PNV analysis is financial, not economic. This means that only quantifiable dollar expenditure and revenue information are included in the calculation. Not included are the substantial benefits associated with improvements in ecosystem function and integrity.

Alternative B (modified) is the most ecologically and economically beneficial alternative and as such, it is the alternative with the greatest net public benefits. This alternative most effectively maintains or improves the socioeconomic contribution and ecosystem integrity of the Forest.

Science Consistency

The revised plan contains a strong framework for adapting management of Forest resources as new scientific information becomes available and plan monitoring reveals new or changing needs. Furthermore, it is my finding that the revision process considers and applies science throughout. Peer reviewed science was used whenever available, reliable, and applicable throughout the assessment process, the development of the revised plan, and preparation of the Final EIS. Extensive site-specific peer reviewed literature was available and used in the development of many plan components for many

resource areas, particularly restoring ponderosa pine ecosystems. In addition to published scientific literature and reports, the Coconino NF solicited input from subject matter experts, and used state-of-the-art ecological modeling, including the Forest Vegetation Simulator (FVS) and the Vegetation Dynamics Development Tool (VDDT).

The revised plan provides a framework for frequent-fire ecosystem restoration (Ponderosa Pine and Mixed Conifer with Frequent Fire ERUs) based on decades of ecological research. Its emphasis on restoring spatial arrangement, structure, and species composition of vegetation is consistent with the best available scientific information synthesized in GTR-310 by Reynolds et al. (2013).

I find this decision to be consistent with the application of the best available scientific information utilized throughout the plan development process, which includes: during assessment of the original 1987 plan for needs for change better reflects management of the Forest; during plan development and evaluation; and during development of the plan monitoring program. Scientific conclusions draw from well-supported data sources, using disclosed and available data. Analyses do not use unproven or controversial data or methods. Sources of information are referenced, and syntheses do not go beyond what the data indicate.

Compatibility with Goals of Other Public Agencies and Indian Tribes

Forest Service planning regulations require the agency to consider other federal, state, and local government and tribal plans and policies. Collaboration guided development of the revised plan, including with State, and local agencies, including the Arizona Game and Fish Department, and local government and community leaders, as well as other Federal agencies, including the U.S. Fish and Wildlife Service. Additional information on the collaboration effort can be found above in the Collaboration with State and Local Governments and Other Federal Agencies and the Response to Public Concerns sections. Consultation with area tribes ensured the components in the revised plan reflect tribal concerns and needs with respect to the Forest. Section I of Appendix B of the Final EIS details the collaboration with other public agencies and tribes the Coconino NF engaged in throughout the plan revision process. Section II of Appendix B of the Final EIS documents the review of other Federal, State, and local governments and tribal planning efforts having potential impacts to the Coconino NF and viceversa.

Environmental Justice

Executive Order 12898 (59 Federal Register 7629, 1994) directs federal agencies to identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects on minority and low-income populations in the local communities. I have determined, from the analysis disclosed in the Final EIS, that the revised plan is in compliance with Executive Order 12898.

Coconino County has a high concentration of American Indian residents (27.3 percent), due to the presence of five reservations in the county (all or part of the Navajo Indian Reservation, Hualapai Indian Reservation, Hopi Indian Reservation, Havasupai Indian Reservation, and Kaibab Indian Reservation). Maricopa County, from which a large number of day use recreation visits originate, has a high proportion

of Hispanic/Latino residents (29.6 percent), although it is equivalent to Arizona's proportion (29.6 percent). In contrast, Yavapai County is less diverse than both the State and nation. Approximately 90 percent of Yavapai County residents are white. As a result, environmental justice issues are more likely to occur in Coconino and Maricopa counties than Yavapai County. However, a finding of low racial/ethnic diversity does not eliminate the need to consider potential disproportionate impacts of Forest Service management actions. A county may have a low overall concentration of minority residents, but still have areas with a high concentration of minority residents who could be adversely affected by management actions.

Based on the minority status and poverty data presented above, Coconino County appears most at risk for environmental justice issues. The largest minority group in the county – American Indians – also experience a very high poverty rate (approximately 50 percent). Furthermore, Coconino County contains the most acreage of the Coconino NF, which suggests that the consequences of management actions will be felt most acutely by Coconino County residents. These conditions underscore the importance of evaluating environmental justice consequences.

The Final EIS analyzed the potential impacts to these groups and identified no environmental justice consequences. Since all alternatives, including Alternative B (modified), would continue to support similar levels of employment and income, they would not exacerbate the poverty rate or disproportionately worsen the economic well-being of low-income individuals. Under all alternatives, American Indian residents would be able to gather forest products and visit sacred sites. None of the alternatives were expected to have disproportionately high and adverse impacts on minority and low-income populations in the local communities.

As required by this Executive Order, the Forest will continue to pay careful attention to the potential health and environmental impacts of management actions upon minority and low-income populations in the local communities. Overall, the themes that form the foundation of the revised plan (i.e., maintenance and improvement of ecosystem health, managed recreation, and community-forest interaction), make the Coconino NF a healthy and enjoyable place to work, reside near, or visit. Therefore, I find no disproportional effects to minority or low-income populations will occur from implementing the selected alternative.

Consultation with the Fish and Wildlife Service

The Coconino NF prepared a biological assessment (BA) to evaluate the potential effects of the revised plan on federally proposed and listed species, critical habitats, and candidate species within the action area. It analyzed the potential effects on 22 species listed below in table 2.

Table 2. Federally listed, proposed, and candidate species; and designated or proposed critical habitats analyzed in the biological assessment

Category	Species	ESA Listing Status	ESA Determination of Effects
Amphibians	Chiricahua leopard frog Lithobates chiricahuensis	Species: Threatened Critical Habitat: Designated	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Birds	California condor Gymnogyps californianus	Species: Experimental Non- essential, Endangered Critical Habitat: None	Species: May affect, not likely to adversely affect Critical Habitat: n/a
Birds	Mexican spotted owl Strix occidentalis lucida	Species: Threatened Critical Habitat: Designated	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Birds	Southwestern willow flycatcher Empidonax traillii extimus	Species: Endangered Critical Habitat: Designated	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Birds	Western yellow-billed cuckoo Coccyzus americanus occidentalis	Species: Threatened Critical Habitat: Proposed	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Birds	Yuma Ridgway's rail Rallus obsoletus yumanensis	Species: Endangered Critical Habitat: None	Species: No effect Critical Habitat: n/a
Fish	Colorado Pikeminnow Ptychocheilus lucius	Species: Experimental Non- essential Critical Habitat: None (but Designated elsewhere)	Species: Not likely to jeopardize Critical Habitat: n/a
Fish	Gila chub Gila intermedia	Species: Endangered Critical Habitat: Designated	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Fish	Gila topminnow Poeciliopsis occidentalis	Species: Endangered Critical Habitat: None	Species: May affect, not likely to adversely affect Critical Habitat: n/a
Fish	Gila trout Oncorhynchus gilae	Species: Threatened Critical Habitat: None	Species: May affect, not likely to adversely affect Critical Habitat: n/a
Fish	Headwater chub Gila nigra	Species: Proposed Threatened Critical Habitat: None	Species: Not likely to jeopardize, if listed – May affect, not likely to adversely affect Critical Habitat: n/a
Fish	Little Colorado spinedace Lepidomeda vittata	Species: Threatened Critical Habitat: Designated	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Fish	Loach minnow Tiaroga cobitis	Species: Endangered Critical Habitat: Designated	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect

Category	Species	ESA Listing Status	ESA Determination of Effects
Fish	Razorback sucker Xyrauchen texanus	Species: Endangered Critical Habitat: Designated	Species: May affect, not likely to adversely affect Critical Habitat: May affect, not likely to adversely affect
Fish	Roundtail chub Gila robusta	Species: Proposed Threatened Critical Habitat: None	Species: Not likely to jeopardize, if listed - May affect, likely to adversely affect Critical Habitat: n/a
Fish	Spikedace Meda fulgida	Species: Endangered Critical Habitat: Designated	Species: May affect, not likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Mammals	Black-footed ferret Mustela nigripes	Species: Endangered Critical Habitat: None	Species: No effect Critical Habitat: n/a
Mammals	Mexican gray wolf Canis lupus	Species: Experimental non- essential Critical Habitat: None	Species: Not likely to jeopardize Critical Habitat: n/a
Plants	Arizona cliffrose Purshia subintegra	Species: Endangered Critical Habitat: None	Species: Likely to adversely affect Critical Habitat: n/a
Plants	San Francisco Peaks ragwort Packera franciscana	Species: Threatened Critical Habitat: Designated	Species: May affect, not likely to adversely affect Critical Habitat: May affect, not likely to adversely affect
Reptiles	Narrow-headed gartersnake Thamnophis rufipunctatus	Species: Threatened Critical Habitat: Proposed	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect
Reptiles	Northern Mexican gartersnake Thamnophis eques megalops	Species: Threatened Critical Habitat: Proposed	Species: May affect, likely to adversely affect Critical Habitat: May affect, likely to adversely affect

The analysis in the BA concluded that the proposed action (Alternative B (modified)) would have "no effect" on the Yuma Ridgway's rail and black-footed ferret. U.S. Fish and Wildlife Service (FWS) concurrence was not requested for these two species due to these "no effect" findings.

The analysis further concludes the proposed action is "not likely to jeopardize" Headwater chub, roundtail chub, and experimental non-essential populations of California condor, Colorado pikeminnow, and Mexican gray wolf; but is "likely to adversely affect" these species: Chiricahua leopard frog and its critical habitat, Mexican spotted owl and its critical habitat, southwestern willow flycatcher and its critical habitat, western yellow-billed cuckoo and its critical habitat, Gila chub and its critical habitat, Little Colorado spinedace and its critical habitat, critical habitat for the loach minnow and spikedace, Arizona cliffrose, narrow-headed gartersnake and its proposed critical habitat, northern Mexican gartersnake and its proposed critical habitat. The BA also concluded that the proposed action is "not likely to adversely affect" these species: Gila topminnow, Gila trout, razorback sucker and its critical habitat, and San Francisco Peaks ragwort and its critical habitat.

The BA was transmitted to the U.S. Fish and Wildlife Service on February 15, 2017, with a request for formal conferencing on the determination that the proposed action is "not likely to jeopardize" five species, and requested formal consultation on the "may affect" determinations for the other 15 species.

In the September 21, 2017 Biological Opinion (BO), the U.S. Fish and Wildlife Service (FWS) provided conference reports and concurrence with the determinations for Gila topminnow, Gila trout, razorback sucker, loach minnow, spikedace, California condor, San Francisco Peaks ragwort, Colorado pikeminnow, and Mexican gray wolf. The FWS concluded that implementation of the proposed action (Alternative B (modified)) may affect but would not jeopardize the continued existence of these 9 species: Gila chub (and headwater chub and roundtail chub), Little Colorado spinedace, narrow-headed gartersnake, northern Mexican gartersnake, Chiricahua leopard frog, southwestern willow flycatcher, western yellow billed cuckoo, Mexican spotted owl, and Arizona cliffrose. The FWS also concluded that implementation is not likely to destroy or adversely modify designated critical habitat for Gila chub (and headwater chub and roundtail chub), Little Colorado spinedace, loach minnow, spikedace, Chiricahua leopard frog, southwestern willow flycatcher, and Mexican spotted owl, and, in conference, proposed critical habitat for the narrow-headed gartersnake, northern Mexican gartersnake, and western yellow billed cuckoo.

The proposed action (Alternative B (modified)) described within the Coconino NF revised plan and associated BA is a "framework programmatic action" as defined in 50 CFR 402.02, where framework programmatic action only establishes a framework for the development of specific future action(s) but does not authorize any future action(s). Under those circumstances, the programmatic action in and of itself does not result in incidental take of listed species. Because a framework programmatic action does not itself authorize any action to proceed, no take is anticipated to result, and, therefore, no incidental take statements were issued as part of the BO. Furthermore, since there are no incidental take statements within the BO, there are equally no implementing terms and conditions.

Findings Related to Other Laws and Authorities

I have considered the statutes governing management of the Coconino NF, and I believe that this decision represents the best possible approach to fulfilling the current statutory duties of the USDA Forest Service. Following are summaries of how the revised Land and Resource Management Plan addresses the National Forest Management Act, National Environmental Policy Act, Endangered Species Act, Multiple-Use Sustained-Yield Act, Clean Air Act, Clean Water Act, National Historic Preservation Act, and Roadless Area Conservation Rule.

National Forest Management Act

The National Forest Management Act (NFMA) requires the development, maintenance, amendment, and revision of land and resource management plans for each unit of the National Forest System. These plans help create a dynamic management system so an interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences will be applied to all future actions on the unit (16 U.S.C. 1604(b), (f), (g), and (0)). Under NFMA, the Forest Service is to ensure coordination

of the multiple uses and sustained yield of products and services of the National Forest System (16 U.S.C. 1604(e)(1)).

NFMA requires the Secretary of Agriculture to promulgate regulations for developing and maintaining forest plans. On April 9, 2012, the Department of Agriculture issued a final planning rule for National Forest System land management planning (2012 Rule) 77 FR 68 [21162-21276]. According to transition language of the 2012 Planning Rule at 36 CFR 219.17(b)(3), the responsible official may elect to complete and approve the plan revision in conformance with the provisions of a prior planning regulation (36 CFR part 299, published at 36 CFR parts 200 to 299, revised as of July 1, 2010). For this revision of the Coconino NF Land and Resource Management Plan, I have elected to follow these provisions, referred to collectively in this document as the 1982 Rule. References in this ROD to sections of 1982 Planning Rule version of 36 CFR are indicated in the citations.

My review of the planning process, the Final EIS, and the information provided in the ROD indicates the revised plan and its preparation meet requirements for revising plans under the provisions of the 1982 Planning Rule, as allowed in the transition provisions of the 2012 Planning Rule at 36 CFR 219.17. Therefore, the revised plan is fully compliant with the Act.

National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires public involvement and consideration of potential environmental and social effects of implementing federal actions. The environmental analysis and public involvement process outlined in the Final EIS complies with the major elements of the requirements set forth by the Council on Environmental Quality for implementing NEPA (40 CFR 1500-1508). These include: 1) considering a range of reasonable alternatives; 2) disclosing cumulative effects; 3) using best scientific information; 4) consideration of long-term and short-term effects; and 5) disclosure of unavoidable adverse effects.

The Coconino NF considered a range of alternatives in the Final EIS and has compiled a comprehensive record of the effects relevant to the alternatives (long-term, short-term, and cumulative), considering best scientific information. The revised plan adopts all practical means to avoid or minimize environmental harm. These means include provisions for providing the ecological conditions needed to support biological diversity and standards and guidelines to mitigate adverse environmental effects that may result from implementing various management practices. The revised plan includes monitoring requirements and an adaptive management approach, assuring necessary adjustments over time.

The revised plan does not represent an irreversible or irretrievable commitment of resources. The revised plan is a programmatic level planning effort and does not directly authorize any ground-disturbing activities or projects. Future ground-disturbing activities and projects will be consistent with this revised plan and subject to additional site-specific public involvement, environmental analysis, and pre-decisional review processes. Therefore, the revised plan is fully compliant with NEPA and CEQ implementation regulations.

Endangered Species Act

The purpose of the Endangered Species Act (ESA) is to provide for conservation of the ecosystems upon which endangered and threatened species depend and for the conservation of such endangered and threatened species. Section 7(a)(1) of the Act requires federal agencies to carry out programs for the conservation of listed species. In addition, ESA requires federal agencies to ensure that any agency action does not jeopardize the continued existence of the species (ESA Section 7(a)(2)). ESA also requires the FWS and Forest Service, respectively, to base the biological opinion and subsequent agency action on the use of best scientific and commercially available data [16 U.S.C. 1536(a)(2)].

In accordance with Section 7(c) of the Act, FWS identified the listed and proposed threatened or endangered species that may be present on the Forest. As described above, a biological assessment was prepared for the revised plan and biological opinion rendered by FWS regarding effects of implementing the revised plan on the threatened, endangered, and candidate species present on or near the Forest.

Multiple-Use Sustained-Yield Act

The Multiple-Use Sustained-Yield Act requires administration of National Forest lands to provide for multiple uses such as recreation, range, timber, watersheds, wildlife, and fisheries. The revised plan establishes a strong multiple use framework by providing desired conditions, standards, guidelines, and objectives related to: ecosystem structure, process, and function; wildlife and fisheries; recreation; traditional and cultural uses; livestock grazing; forestry and production of forest products; special uses; mining and minerals extraction; and energy transmission and development.

Clean Air Act

According to the Clean Air Act of 1990 and the Organic Administration Act of 1897, the Forest Service has the responsibility to protect the air, land, and water resources from the impacts of air pollutants produced within the Forest Service boundaries and to work with states to protect air resources from degradation associated with the impacts of air pollution emitted outside of Forest Service lands. The revised plan contains desired conditions, guidelines, and management approaches to protect air quality. Furthermore, analysis of the effects of implementation of the revised plan on air quality in the Final EIS support the expectation that all alternatives achieve the desired conditions for air quality. However, compared to Alternative A, Alternative B (modified) has a lower susceptibility to uncharacteristic, high emission-producing fires, which have a high potential to negatively impact air quality, over time.

Clean Water Act

The revised plan contains direction to provide for the maintenance or improvement of water quality in the natural and constructed waters of the Forest. Furthermore, reducing the risk of uncharacteristic high-severity fire will facilitate protection of crucial water sources for numerous people in Arizona. The Inner Basin of the San Francisco Peaks and the Lake Mary watersheds supply water for the City of Flagstaff. The watersheds surrounding C.C. Cragin Reservoir provide water for the Town of Payson and other communities in northern Gila County. Nearly 1,500 square miles of watersheds on the Coconino NF support the Verde River, which is an important part of the water supply for the Phoenix metropolitan area.

Overall, implementation of the revised plan expects to contribute to protecting or restoring the physical, chemical, and biological integrity of waters of the Forest in accordance with the Clean Water Act.

National Historic Preservation Act

The revised plan is a programmatic action and does not authorize any site-specific projects. Projects undertaken in response to direction in the revised plan will fully comply with the laws and regulations that ensure protection of heritage resources. The revised plan contains direction for heritage resource management, including direction to integrate such management with other resource management activities. Because the revised plan does not authorize ground-disturbing activities, consultation with the Arizona State Historic Preservation Office under the National Historic Preservation Act is not required, per the 2003 Programmatic Agreement between the Forest Service's Southwestern Region and the State Historic Preservation Officers (SHPO) of Arizona, New Mexico, Oklahoma, and Texas. It is my determination that the revised plan complies with the National Historic Preservation Act and other statues that pertain to the protection of cultural resources.

Roadless Area Conservation Rule

Management activities in Inventoried Roadless Areas are conditional on the 2001 Roadless Area Conservation Rule (RACR). During the development of the issues and alternatives in the associated EIS, the 2001 RACR was subject to litigation. However, on March 1, 2012, the nation-wide injunction on implementing the RACR was vacated and the RACR was placed back in effect. Consequently, the 2001 RACR's restrictions on timber harvesting and road building apply to all Inventoried Roadless Areas (IRAs). While the management direction that was developed in Alternative A would allow timber harvest and road construction in some IRAs, the 2001 RACR would not allow such activities to be implemented. However, the management direction in the Selected Alternative (B (modified)), and Alternatives C and D, is consistent with the 2001 RACR. These alternatives include a desired condition and standard designed to maintain the overall roadless character of inventoried roadless areas (SA-IRA-DC-1 and SA-IRA-S-1).

Project Consistency

I am providing the following transition direction to ensure the orderly implementation of the revised plan that is made in this Record of Decision. The revised direction will apply to all project decisions made on or after the effective date of this decision. The revised direction does not apply to any projects that have had decisions made prior to the effective date of this decision. Projects currently under contract, permit, or other authorizing instrument are not affected by the decision; however, projects may be modified to adopt all or part of this direction where Forest Service managers deem appropriate. Re-issuance of existing authorizations will be treated as new decisions, which must be consistent with the revised direction described in the revised plan subject to valid existing rights.

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 revised plan must be consistent with the applicable plan components (16 U.S.C. 1604(i)) as described at 36 CFR 219.15 of the 2012 Planning Rule. (Although the transition provisions at 36 CFR 219.17 of the 2012 Planning Rule allow revision of the

Record of Decision for the Coconino National Forest Land and Resource Management Plan

1987 plan under the 1982 regulations, subsequent projects or activities approved on units with plans revised under a prior planning rule must comply with the consistency requirement at 219.15 of the current rule.)

Achieving consistency with the revised plan requires developing management activities specifically designed to achieve the desired conditions and objectives of the revised plan, guided by relevant standards and guidelines. To the extent practicable, documentation for such projects should identify the elements of the achievable desired conditions, goals, or objectives. Recognizing not all projects or activities would contribute to all desired conditions, goals, or objectives, but rather to a limited subset, and that some projects designed to contribute to some desired conditions, goals, or objectives may have consequences considered adverse to the achievement of other desired conditions, goals, or objectives, the project's responsible official needs to identify and disclose these effects in the project documentation and make a decision that balances these considerations.

A project or activity approval document must describe how the project or activity is consistent with the revised plan by the criteria listed at 36 CFR 219.15(d) (2012 Planning Rule). Where a proposed project or activity would not be consistent with direction in the revised plan, the responsible official has the following options (36 CFR 219.15(c) 2012 Rule):

- 1. Modify the proposed project or activity to make it consistent with the applicable plan components;
- 2. Reject the proposal or terminate the project or activity;
- 3. Amend the plan so that the project or activity will be consistent with the plan as amended;
- 4. Amend the plan contemporaneously with the approval of the project or activity so that the project or activity will be consistent with the plan as amended. This amendment may be limited to apply only to the project or activity, and may be adopted at the same time as the approval of the project or activity (36 CFR 219.15(c)(4) 2012 Rule).

Any resource plans (e.g., 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 components in the revised plan. Resource plans developed prior to plan decisions contained in the revised plan (i.e., Desired Conditions, Objectives, Standards, Guidelines, Suitability), must be evaluated for consistency with the revised plan and amended if necessary (36 CFR 219.15(e) 2012 Rule).

Authorizations for occupancy and use made before the final ROD may proceed unchanged until time of reauthorization. At time of reauthorization, all permits, contracts, and other authorizing instruments must be made consistent with the revised plan, subject to existing valid rights, as provided at §219.15(d) (2012 Rule).

A forest plan is used as a direction source for future projects, plans, and assessments. It is not expected that this revised direction be used to re-evaluate or change decisions that have been made under the 1987 plan. A smooth and gradual transition to the revised 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 to the revised plan direction is expected.

Plan Implementation

Throughout the life of the revised plan the Forest will build community relations, foster partnerships and enhance tribal relations by:

- Providing for economic contributions to communities for recreation, grazing, and timber as a byproduct to support vibrant communities.
- Painting the vision for furthering partnerships and expectations through collaboration and vibrant communities to expand and strengthen both tribal relationships and diverse community ties.
- Foretelling how sustainable recreation is key to our visitor experiences and vibrant communities.
- Protecting potential values at risk by restoring the landscape through ecosystem and watershed restoration.
- Preparing diverse ecosystems to retain their function to survive natural disturbances, such as fire and drought, threats to sustainability, and an increasing human population with local and regional needs.

Implementation Schedules and Budgets

Implementation of the revised plan is through a series of project-level decisions based on site-specific environmental analysis and public involvement. Documentation of these analyses is in the appropriate NEPA documents. The revised plan seeks to guide management activities and projects by establishing clear desired conditions for the Coconino NF rather than by establishing schedules for actions. This approach should leave more flexibility for managers to adapt program and project selection as changes take place in budgets, resource capabilities, and management priorities.

Outputs in the Final EIS are projections of probable outcomes. Probable outcomes outline approximate activities and practices, in order to estimate the likely environmental effects of following the direction provided by the revised plan.

Maintaining the Land Management Plan and Adapting to New Information

A Land and Resource Management Plan is an integral part of an adaptive management cycle that guides future management decisions and actions. Adaptive management includes:

- Defining measurable management objectives.
- Monitoring management outcomes and changing circumstances.
- Revising management strategies accordingly (with appropriate NEPA).

This adaptive management cycle enables the Forest to identify and respond to changing conditions, changing public desires, and new information. The Forest's monitoring program is an integral part of this adaptive management cycle, and consists of monitoring questions and metrics (see Chapter 5 of the revised plan for additional information about the monitoring plan).

Monitoring and Evaluation

Monitoring and evaluation methods assess the degree to which on-the-ground management is maintaining or making progress toward the desired conditions and objectives in the revised plan. Chapter 5, "Monitoring Strategy" describes the revised plan's monitoring program. Developed collaboratively, it focuses on key plan components where management projects and activities are likely to cause a change over time.

Specific monitoring questions are identified and directly linked to desired conditions, objectives, standards in the revised plan, and specific regulatory requirements. Only selected goals, objectives, and standards are monitored. Relevancy to issues, compliance with legal requirements, scientific credibility, administrative feasibility, long- and short-term budget considerations, and impact on work force all influence monitoring priorities.

Monitoring information will be evaluated and used to update inventory data, improve current and future mitigation measures, and assess the need to change the strategies used in plan implementation. Evaluation of monitoring results are directly linked to the decision maker's ability to respond to changing conditions, emerging trends, public concerns, and new information and technology. No single monitoring item or parameter automatically triggers a change in plan direction. An interdisciplinary approach uses and evaluates available information and needed changes.

The 2012 Planning Rule requires that forest plans developed under prior planning regulations, including the 1982 Planning Rule, follow the updated 2012 Rule guidance on the required content in the monitoring plan. A monitoring program, consistent with 2012 Rule monitoring requirements, is to contain one or more monitoring questions and associated indicators addressing nine monitoring categories, consistent with the monitoring requirements identified in the 2012 rule planning directives (FSH 1909.12, Chapter 30). The Coconino NF developed the monitoring strategy for the revised plan consistent with the requirements of the 1982 Rule, but also with an eye towards meeting the 2012 Rule monitoring requirements.

Plan Amendments

Amendments to a forest plan may occur at any time based on a preliminary identification of the need to change the plan. The preliminary identification of the need to change the plan may be based on a new assessment, forest plan monitoring, or other documentation of new information and changed conditions or circumstances. The amendment and administrative change process is described at 36 CFR 219.17(b)(2) of the 2012 Planning Rule.

The revised plan is a dynamic instrument. It can be changed with appropriate public involvement and environmental analysis. Throughout the life of the revised plan, amendments may be necessary to incorporate new information, new policy and direction, or changing values and resource conditions. Amendments will keep the revised plan current, relevant, and responsive to agency and public concerns. Amendments are needed whenever any of the decisions in the revised plan should be changed due to any of the above conditions. The revised plan also can be amended for specific projects if during project design it is determined that the best method of meeting goals and objectives conflicts with standards and

guidelines in the revised plan. Deviation from a guideline must be specified in either the decision document or elsewhere in the project record with supporting rationale. When deviation from a guideline does not meet the original intent, a plan amendment is required. Any deviation from a standard requires a plan amendment.

The 3-year transition period provided for in the 2012 Planning Rule to allow use of the 1982 Planning Rule provisions to amend Forest Plans has expired. All amendments that may be undertaken in the future to the revised plan will be conducted under the direction of the 2012 Planning Rule and Directives.

Effective Date

The revised Coconino NF Land and Resource Management Plan will become effective 30 days from the date that the Environmental Protection Agency's Notice of Availability of the Final EIS appears in the Federal Register (per 36 CFR 219.17(a), 2012 Rule).

Appeal Information

This decision is subject to administrative review. According to 36 CFR 219.17(b)(3), if the responsible official chooses to complete an ongoing planning process under the provisions of the prior planning regulation, the responsible official can choose to allow for either an administrative appeal or can follow the objection process identified in 36 CFR 219 Subpart B. When the option is made to proceed under the 1982 regulations and to follow the administrative appeal process, the "Optional Appeal Procedures Available during the Planning Rule Transition Period" (the former 36 CFR 217 appeal procedures that were in effect prior to November 9, 2000) are to be used. For this decision, I have decided to use the "Optional Appeal Procedures."

A written notice of appeal must be filed in duplicate and postmarked or received within 90 days after the date the legal notice of this decision is published in the newspapers of record for the Coconino NF (The Arizona Daily Sun). The appeal must clearly state that it is a Notice of Appeal being filed pursuant to the Optional Appeal Procedures. Appeals must meet the content requirements of Section 9 of the Optional Appeal Procedures, which are available for review at:

http://www.fs.fed.us/emc/applit/includes/PlanAppealProceduresDuringTransition.pdf

Appeals must be filed with the Chief of the Forest Service at:

Physical address (for UPS and FedEx deliveries):

USDA Forest Service Attn: Appeal Reviewing Officer 201 14th Street, SW Yates Building, EMC, 2CE Washington, DC 20024

(Note: If a phone number is needed for carrier delivery, use: 202-205-1449)

Record of Decision for the Coconino National Forest Land and Resource Management Plan

Regular mail:

USDA Forest Service Attn: Appeal Reviewing Officer 1400 Independence Ave., SW EMC, Mailstop 1104 Washington, DC 20250

Appeals may also be faxed (Fax number is 202-649-1172) or appeals may be mailed electronically in a common digital format to:

appeals-chief@fs.fed.us

The notice of appeal must be fully consistent with the Optional Appeal Procedures and include at a minimum:

- A statement that the document is a Notice of Appeal filed pursuant to the Optional Appeal procedures;
- The name, address, and telephone number of the appellant;
- Identification of the decision to which the appeal is being made;
- Identification of the document in which the decision is contained, by title and subject, date of the decision, and name and title of the Deciding Officer;
- Identification of the specific portion of the decision to which the appeal is made;
- The reasons for appeal, including issues of fact, law, or regulation, or policy and, if applicable, specifically how the decision violates law, regulation, or policy;
- Identification of the specific change(s) in the decision that the appellant seeks.

Requests to stay the approval of this Land and Resource Management Plan shall not be granted (Optional Appeal Procedures, section 217.10 (b)).

Final decisions on proposed projects will be made on a site-specific basis using appropriate analysis and documentation in compliance with NEPA. Project decisions may be subject to the appropriate administrative review procedures, at the time the project decision is made.

Recommendations for designations such as additions to the National Wilderness System are preliminary administrative recommendations that will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and/or the President of the United States. The Congress has reserved the authority to make final decisions on wilderness on federal lands; therefore, wilderness recommendations in the revised plan are not appealable under the agency's administrative appeal procedures (Section 4 of the Optional Appeal Procedures).

I encourage anyone concerned about the revised Coconino NF Land and Resource Management Plan or Final EIS, or who would like more information, to contact:

Laura Jo West
Forest Supervisor
Coconino Forest Supervisor's Office
1824 S. Thompson Street
Flagstaff, AZ 86001
(928) 527-3600

Approval

I am pleased to announce my decision to select Alternative B (modified) for the revised Land and Resource Management Plan for the Coconino NF. This revised plan has been built on a strong foundation of engagement with State and local governments, tribes, other Federal agencies, citizen collaboration, and engagement with commodity based, conservation, and other organizations, and incorporates the best available science.

3/13/18

Calvin N. Joyner Regional Forester

Southwestern Region, USDA Forest Service