Southwestern Region

Santa Fe National Forest

July 2022

Record of Decision

Santa Fe National Forest Land Management Plan

Rio Arriba, San Miguel, Sandoval, Santa Fe, Mora, and Los Alamos Counties, New Mexico



Cover image: Tent rocks near Wildcat Canyon on the Jemez Ranger District, Santa Fe National Forest. Photo credit: Julie Luetzelschwab.

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Record of Decision for the Santa Fe National Forest Land Management Plan

Rio Arriba, San Miguel, Sandoval, Santa Fe, Mora, and Los Alamos Counties, New Mexico

Lead Agency: USDA Forest Service

Responsible Official: Debbie Cress, Forest Supervisor

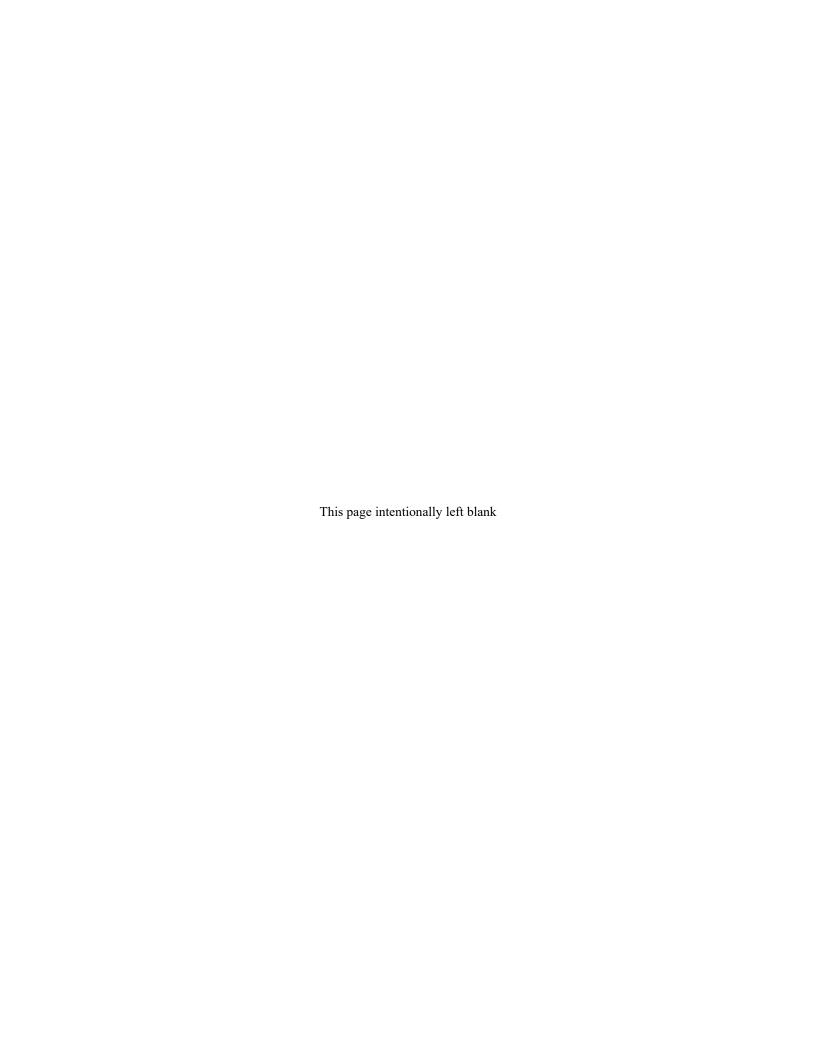
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Acronyms

BASI Best available scientific information

CFR Code of Federal Regulations

DA Designated area

DC Desired conditions

DEIS Draft environmental impact statement

ESA Endangered Species Act

FEIS Final environmental impact statement

FPR Forest plan revision

FW Forestwide

GA Geographic areas (may also be MA for management areas)

GIS Geographic Information System

GDL Guideline

MA Management area

MMCF Million cubic feet

MOU Memorandum of understanding

NEPA National Environmental Policy Act

NF National forest

NFS National Forest System

NOI Notice of Intent

ORV Outstandingly remarkable value

ROD Record of Decision

ROS Recreation opportunity spectrum

RWMA Recommended wilderness management area

SCC Species of conservation concern

SIO Scenery integrity objectives

THPO Tribal Historic Preservation Office

Record of Decision for the Santa Fe National Forest Land Management Plan

USDA United States Department of Agriculture

USFS United States Forest Service

USFWS United States Fish and Wildlife Service

Introduction

This record of decision (ROD) documents my decision and rationale for approving the Santa Fe National Forest (NF) Land Management Plan (forest plan or Plan). The decision implements the Forest Service's 2012 Land Management Planning Rule at 36 CFR Part 219 and fosters productive and sustainable use of our National Forest System lands in promoting sound land stewardship partnership with communities and advances other strategic goals of the U.S. Department of Agriculture, including:

- Ensuring programs are delivered efficiently, effectively, and with integrity and a focus on customer service;
- Facilitating rural prosperity and economic development; and
- Ensuring productive and sustainable use of our National Forest System lands.

The Santa Fe NF plays a unique role in supporting communities in northern New Mexico, as well as throughout the southwestern United States. This Plan implements the U.S. Department of Agriculture strategy and was designed with the following three goals in mind:

- Maintain or restore sustainable, resilient terrestrial ecosystems;
- Protect and restore watershed health, water resources, aquatic ecosystems, and the systems that rely on them;
- Actively contribute to social and economic sustainability in the broader landscape and connect citizens to the land.

The Santa Fe National Forest Plan improves customer service to the American people by simplifying management of the forest. As a result of public input, we reduced the number of management areas. The public will benefit with a management plan that is easier to read and understand. The revised Plan is less prone to future conflict over different interpretations of language and overly complex management areas.

The Santa Fe National Forest (Santa Fe NF) contributes to rural prosperity, providing economic opportunities for fuelwood, livestock grazing, and abundant recreational opportunities. Many local communities draw from the forest's abundant fuelwood that is used as the primary and sometimes only fuel source for cooking and heating in rural homes. Traditional communities and families that live around the Santa Fe NF continue to look to forest resources for economic opportunity and vitality and to sustain the cultural practices that form the backbone of northern New Mexico life. The Plan recognizes adaptive, active forest management as a primary tool to achieve our Forest Vision. It provides a platform for achieving this vision by restoring fire resiliency to the landscape, providing clean and abundant water, and honoring and strengthening ties to the land.

Water quality and aquatic health are persistent overarching concerns, as are the risk to life, property, and ecosystems that uncharacteristic fires represent. The Plan incorporates new fire management approaches that will reduce the risk of uncharacteristic wildfire, thereby benefitting municipal water suppliers as well as downstream water users, while moving fire-adapted ecosystem toward resiliency and improved health. It focuses on collaboration and efforts within important watersheds for the benefit of sensitive species, acequias, and municipal water systems and improves wildlife habitat and reduces risk to cultural resources.

Access to traditional forest uses and resources, as well as a variety of recreation opportunities, is highly valued by communities in and around the forest. The Plan emphasizes working in partnership with local communities, including tribes and community land grants, to ensure access to sacred sites, ceremonies, and forest products (e.g., fuelwood). It also provides direction to support sustainable, community-centered recreation and economic opportunities.

Directly affected by this decision are Rio Arriba, San Miguel, Sandoval, Santa Fe, Mora, and Los Alamos Counties, New Mexico.

Forest Setting

The Santa Fe NF is located in northern New Mexico and encompasses more than 1.6 million acres across six counties in the Jemez and Sangre de Cristo mountain ranges within the Rio Grande valley. The Santa Fe NF is one of five national forests in New Mexico; it was established in 1915, when President Woodrow Wilson signed Executive Order 2160, thereby merging the Jemez and Pecos National Forests. The Santa Fe NF is divided into five ranger districts: Coyote, Cuba, and Jemez span the Jemez Mountains and are west of the city of Santa Fe (referred to as the "west side"); Pecos-Las Vegas spans the Sangre de Cristo Mountains east of the city of Santa Fe (referred to as the "east side"); and Española runs down the middle and is located on both east and west sides. The Santa Fe NF shares borders with the Carson National Forest, Bandelier National Monument, Pecos National Historic Park, the Valles Caldera National Preserve, Los Alamos National Laboratories, land administered by the Bureau of Land Management, nine pueblos, one tribal nation, and various land grants.

The Santa Fe NF is unique in its diverse geographies, natural settings, and its historical and cultural richness. These unique qualities result in numerous distinct contributions to the local area, region, and Nation in the form of habitat for rare and endangered species, essential ecosystem services and multiple uses, protection and support of cultural values and traditions, and outstanding recreation opportunities.

The Santa Fe NF provides jobs in recreation services, livestock grazing industries, and forest products. Timber is not a major industry in the Santa Fe NF, partly because there are few large trees of commercial value. Instead, the value many local communities draw from the forest's wood resources is the abundant fuelwood that local residents rely on for home heating. For centuries, the forest has also provided forage for livestock grazing; a place to fish and hunt wild elk, deer, turkey, and other game; and water to irrigate crops via acequias. Many of the ways the forest is used today continue from traditional cultures and lifestyles and are as crucial for subsistence among contemporary residents of small rural communities as they were generations ago. The forest also continues to provide access and resources for dozens of communities of land grant heirs.

The Santa Fe NF provides places for traditional ceremonies, religious worship, and is where many sacred sites important to federally recognized tribes and pueblos are located. Today, over 30 tribes look to the Santa Fe NF as part of their ancestral domain, including the Pueblos of Santa Clara, Tesuque, Nambe, Ohkay Owingeh, Pojoaque, Santo Domingo, Santa Ana, San Felipe, San Ildefonso, Cochiti, Zia, and Jemez; the Navajo Nation; and the Jicarilla Apache Nation. These

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¹ The word "acequia" is derived from Arabic and means community ditch. The Spanish adopted the technology to create the irrigation ditches and used it throughout their conquered lands, Acequias are historic irrigation systems with governance dictated by regulations outlined in the New Mexico State Statutes.

Tribes still hold a strong connection to the forest and the value is high because of the ancestral connection and continued use of the forest for cultural and subsistence practices.

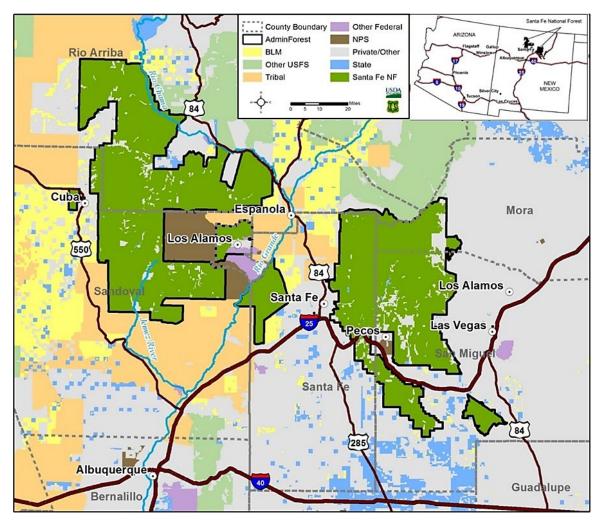


Figure 1. Map of Santa Fe National Forest and vicinity

Numerous endemic species are found in the forest, including the Rio Chama blazing star, found only in the Chama River Canyon, and the Holy Ghost ipomopsis, found only in the Holy Ghost Canyon. The forest provides critical habitat for four threatened and endangered species, including habitat that supports a large portion of the Mexican spotted owl populations within the region.

Springs and aquifers are found throughout the forest and provide continuous supplies of water. Riparian corridors and aspen groves attract visitors and provide disproportionately important wildlife habitat because of the water they provide. Water captured as snow by the forest's mountains travels through hundreds of streams across the landscape, delivering water beyond the national forest boundaries. Historic acequias channel water from the forest to surrounding small farms and communities, as they have done for hundreds of years. The Rio Grande and Pecos Rivers, New Mexico's two longest and most important rivers, flow through the Santa Fe NF, the headwaters of the latter originating from high in the Pecos Wilderness. In addition, municipal waters for surrounding communities, including the Santa Fe watershed for the city of Santa Fe and the Gallinas watershed for the city of Las Vegas, are in the Santa Fe NF.

Oil and natural gas from the Cuba Ranger District annually² provides 1.5 million gallons of gasoline, electricity for 11,800 homes, employment opportunities, and significant revenue for the State of New Mexico.

The parts of the Santa Fe NF that lie between the arid grasslands and alpine peaks are the most popular for recreation, with their diverse and beautiful landscapes. From developed to dispersed and from winter snow activities to summer days along the riverbanks, visitors enjoy a diversity of recreational opportunities. Downhill skiing and snowboarding at Ski Santa Fe in the Sangre de Cristo Mountains and river rafting and boating down the Rio Chama are two popular activities that draw people to the Santa Fe NF. The expansive Pecos Wilderness, with its dense spruce-fir forests, is a prime destination for backpackers. Elk, along with other hunted species such as Bighorn sheep, deer, and turkey, provide cultural connections to the Santa Fe NF as well as outstanding recreational opportunities and employment opportunities for outfitters and guides.

Designated areas celebrate special places across the Santa Fe NF. About 18 percent of the forest is managed as one of four congressionally designated wilderness areas—the Pecos Wilderness, San Pedro Parks Wilderness, Chama River Canyon Wilderness, and the Dome Wilderness. There are three designated wild and scenic rivers: the Rio Chama, the Pecos River, and the East Fork of the Jemez River. These rivers not only provide recreational opportunities, but over half of the river miles are characterized by high water quality and few developments along their banks. Many of these designated areas also provide for exceptional recreational opportunities in the Santa Fe NF. The Jemez National Recreation Area is the only national recreation area in the southwestern region. Four of New Mexico's eight national scenic byways traverse the Santa Fe NF, as well as the Continental Divide Trail, one of the Nation's 11 national scenic trails. Two national recreation trails and three of the Nation's 19 national historic trails also pass through the forest.

Need for Change

Over 30 years have passed since the regional forester approved the original forest plan in July 1987; since then, it has been amended 17 times. The last 30 years have yielded new scientific information and understanding and changes in economic, social, and ecological conditions, resulting in a shift in management emphasis from outputs to outcomes. A complete revision of the 1987 Forest Plan is needed to: (1) meet the legal requirements of the National Forest Management Act and the provisions of the 2012 Planning Rule, (2) guide natural resource management activities in the forest for the next 10 to 15 years, and (3) address the needs for change in management direction.

In preparation for forest plan revision, the Santa Fe NF identified guidance in the 1987 Forest Plan that is working, new conditions that need to be addressed, and ongoing challenges that could be better addressed. This preparatory work is documented in two documents completed in June 2016, the "Assessment Report of Ecological, Social, and Economic Conditions, Trends, and Sustainability" (USDA Forest Service 2016a and 2016b) and "Findings from the Final Assessment: Twelve Focus Areas and Needs for Change Statements" (USDA Forest Service 2016f). The Santa Fe NF identified current ecological and socioeconomic conditions and trends on the forest and associated "needs for change" to be addressed in the draft forest plan. Findings from the Final Assessment resulted in needs for change statements for 12 focus and 10 non-focus resource areas. Those needs for change were grouped into the following five themes:

• Restore ecosystem resilience: Restoration of vegetation composition and structure to align with historic conditions and reduce the risk of uncharacteristic wildfires.

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² 2017 production data

- Deliver provisioning ecosystem services: Provision of ecosystem services, such as clean air and water, healthy soils, and ecosystems resilient to climate change to provide the foundation for healthy forests.
- Support traditional and cultural uses: Maintenance of forest uses for living descendants as a part of their culture, traditional way of life, and rural prosperity.
- Address recreation and multiple uses: Provide a variety of recreation opportunities, as well
 as better-maintained and new recreation trails, to address increased concentration of
 recreation use over the life of the 1987 Forest Plan.
- Support all resources: Identification of certain areas with unique features or uses that have different management than forestwide direction.

The public commented on these needs for change and the initial plan components based on them after the Notice of Intent to revise the 1987 Forest Plan was published in the Federal Register on June 30, 2016. We used these issue categories to develop the draft Plan and alternatives to the proposed plan. Public comments on the draft plan and draft environmental impact statement were then used to further refine the preferred alternative. The Santa Fe Forest Land Management Plan is a shared product resulting from extensive public involvement throughout the plan revision process.

Engagement with Federal Agencies, State and Local Governments, and others, including Indian Tribes and the Public

Public involvement, a point of strong emphasis in the 2012 Planning Rule (36 CFR 219), has been invaluable to the development of the Santa Fe NF final Plan. In revising the forest plan, we sought to build on existing engagement with its many public stakeholders through conservation education, working agreements, partnerships, and volunteers. Throughout plan revision, we collaborated with the general public and our cooperating agencies, as well as Federal, State, and local governments; federally recognized tribes and pueblos; rural historic communities; land grant-merced and acequia governing bodies; rural historic communities; non-profit organizations; private landowners; youth; and the public.

In particular, cooperating agencies and various Federal, State, local, and tribal governmental entities contributed their knowledge and understanding of the concerns and needs of local communities in northern New Mexico to the plan revision process. The Santa Fe NF established a Governmental Working Group with State, county, local, and tribal governments and other Federal agencies. In meetings held over the planning period between 2014 and 2019, cooperating agencies engaged in discussions and provided input regarding pre-draft and draft work products with the forest and other cooperating agencies, nongovernmental groups, and the general public.

Additionally, in preparing the forest plan, the planning team reviewed the objectives expressed, and evaluated the interrelationships between, relevant planning and land use policies and the forest plan. For the most part, the Plan complements these other planning efforts. We considered these plans, assessments, and strategies in developing plan components to ensure as much alignment as was practicable. Management approach sections of the Plan articulate identified issues and opportunities for coordinating with various partners across administrative boundaries, particularly State, local, tribal, and Federal agencies. Cross-boundary issues include managing for wide-ranging species and wildfire across agency boundaries and working together to improve efficiency. While there were some differences related to the differing missions, no conflicts requiring alternative development were identified.

Federal Agencies, State and Local Governments

Federal Agencies

The Santa Fe NF's jurisdiction overlaps with, surrounds, and interacts with public lands administered by numerous other Federal agencies. One of these agencies is the Bureau of Land Management (BLM), which administers public lands adjacent to National Forest System lands as well as subsurface public lands (involved in mineral leasing) that lie under public lands under Forest Service jurisdiction. Other agencies include the National Park Service (NPS), which administers multiple national monuments sharing borders with the Santa Fe NF, and other national forests to the north and south of the Santa Fe NF. Each of these agencies manages lands in or around the Santa Fe NF with comprehensive land management plans, many of which touch on the same natural resource, socioeconomic, cultural, and historic issues and goals dealt with in the Plan. These plans were evaluated to assess compatibility with Santa Fe NF management direction; none were found to be in conflict.

Consistency with the Carson and Cibola National Forests

The Santa Fe NF has collaborated extensively with both the Carson and Cibola NFs to create consistent forest plans. This work was directed by the Southwestern (R3) Regional Forester, in recognition of the importance of consistent management to the region's traditional communities, including federally recognized tribes, Spanish and Mexican land grants-mercedes, acquia associations, grazing stakeholders, and other rural historic communities. Through this consistency effort, all three forest plans recognize historic and contemporary cultural resources, uses, and practices important to tribes and pueblos; land grant communities; acequia associations; and other communities with historic, cultural, and social connections to lands managed by the forests but that pre-date the establishment of the Forest Service. There is also a high level of consistency in plan direction for other sections, including sustainable rangelands and livestock grazing, traditional use of forest products (fuelwood, construction materials), vegetation, restoration of fire, and some shared designated areas such as the Continental Divide National Scenic Trail and wilderness. Inconsistent sections of the plans, such as management areas, are necessary to adapt to each national forest's unique circumstances.

State Agencies

New Mexico State agencies manage numerous lands and resources throughout the state. Many of the State agencies were invited to participate in technical meetings and as cooperating agencies and, in this respect, have been key participants in the forest plan revision (FPR) process. Technical meetings offered a chance to engage in the FPR process through in-depth discussion and working meetings with forest resource specialists. The following agencies and independent subdivisions of state government signed on as cooperating agencies:

- East Rio Arriba Soil and Water Conservation District;
- La Jara Ditch Association;
- Nacimiento Community Ditch Association;
- New Mexico Department of Agriculture;
- New Mexico Economic Development Department;
- New Mexico Environment Department;

³ "Mercedes" means "grants" in Spanish and references land grants made from Spain and Mexico.

- New Mexico Forest and Watershed Restoration Institute;
- New Mexico Department of Game and Fish;
- New Mexico Energy, Minerals, and Natural Resources Department, State Forestry Division, Las Vegas District and Botany Programs;
- New Mexico Land Grant Council;
- Santa Fe Pojoaque Soil and Water Conservation District; and
- Tierra y Montes Soil and Water Conservation District

Not all of the agencies had specific land management plans available for evaluation in the context of the forest plan, but several resource management plans and overarching agency management goals were evaluated, where applicable. These plans were typically in concordance with the forest plan, with similar goals for recreation, public safety, and ecological stewardship.

County Governments

The Santa Fe NF lies in seven counties in New Mexico: Los Alamos, Mora, Rio Arriba, San Miguel, Sandoval, Santa Fe, and Taos. County comprehensive plans can be used as a source of information on the history of land use within the region, the patterns of development, desired conditions, and current county land use policies. County governments hold no legal authority over independent jurisdictions such as Federal and State lands, incorporated cities and towns, or Native American tribal reservations. County land use within the planning area ranges from traditional uses, such as farming and ranching, in rural areas to denser concentrations of residential, industrial, and commercial uses in and around suburban (e.g., White Rock) and urban areas (e.g., Santa Fe and Albuquerque metropolitan areas). One common theme is how, and whether, private owners and public land managers can manage the competing priorities of resource conservation and economic development—in particular, how to cope with the growing demands for housing and recreation while ensuring preservation of a shrinking natural resource base that contributes to New Mexico's highly valued "rural character."

We evaluated comprehensive plans for six of the seven New Mexico counties in which the Santa Fe NF is located.⁴ Additionally, the Santa Fe NF Plan Revision Team invited all counties to act as cooperating agencies and met with county planning teams in Los Alamos, Rio Arriba, San Miguel, and Sandoval Counties to share information; the remaining counties were unavailable to meet with the forest. A joint meeting with the Carson NF was held in Taos County.

Federally Recognized Tribes

The Santa Fe NF consists of lands used by Tribal and Pueblo Nations since time immemorial. The forest shares borders with 10 different tribes and consults with over 24 federally recognized tribes. Quarterly memorandum of understanding (MOU) meetings are held with five Pueblos (Jemez, Tesuque, Cochiti, Santa Clara, and Ohkay Owingeh) and many of the forest's tribal partners are involved in shared stewardship of the landscapes on and around their reservation lands.

Between 2013 and 2018, 73 meetings regarding forest plan revision were held between the Santa Fe NF and tribes. The 73 meetings consisted of 3 USDA cadre meetings, an All Pueblo Governor

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⁴ Taos County land use policies were excluded from our review, because only 0.2 acre of Taos County overlaps the Santa Fe National Forest—all of it in the Pecos Wilderness, an area over which Taos County has limited land use authority.

Council, 2 need-for-change tribal meetings, an intertribal FPR Roundtable, 11 Introduction to FPR meetings, 6 FPR tribal meetings, and 49 MOU meetings that included the FPR process. Tribal officials were also invited to attend general and technical meetings.

Many concerns raised in meetings centered around managing for sustainable, healthy forests on National Forest System (NFS)-tribal borders; maintaining access to important or sacred sites for tribal members while reducing impacts from other forest users; and ensuring tribal-related plan direction was accurate and helpful. The team also reached out to the following tribal partners, inviting them to share land management plans currently in use by their respective governments:

- Pueblo of Tesuque
- Jemez Pueblo
- Santa Clara Pueblo
- San Felipe Pueblo
- Ohkay Owingeh
- Zia Pueblo
- San Ildefonso Pueblo
- Jicarilla Apache Nation
- Pueblo de Cochiti

Only Santa Clara responded to outreach about management plans, noting that they have an MOU with the forest and that collaboration with us has been successful in terms of implementing hazardous fuels projects and silviculture practices—key features of the forest plan. Tribal officials from Zia Pueblo communicated to the forest plan revision team that no relevant planning documents are currently in use.

The Pueblo of Tesuque is also a cooperating agency in the FPR process and has been involved with reviewing documents and working with the forest along with other agencies.

Cooperating Agencies

In August 2016, the Santa Fe NF solicited interest from 81 Federal, State, local and tribal governments in their being cooperating agencies for the plan revision process. Although 20 agencies expressed initial interest, 10 agencies ultimately signed on as cooperators in January 2017. Additional agencies signed on as cooperators in May 2017 and December 2018. The cooperating agencies for the Santa Fe NF's plan revision process include:

- East Rio Arriba Soil and Water Conservation District
- New Mexico Energy, Minerals, and Natural Resources Department; State Forestry Division; Las Vegas District and Botany Program
- New Mexico Environment Department
- La Jara Ditch Association
- Nacimiento Community Ditch Association
- New Mexico Department of Agriculture
- New Mexico Economic Development Department

- Tierra y Montes Soil and Water Conservation District
- New Mexico Department of Game and Fish
- New Mexico Land Grant Council
- Santa Fe Pojoaque Soil and Water Conservation District
- Tesuque Pueblo
- New Mexico Forest and Watershed Restoration Institute

Cooperating agencies attended technical and general public meetings to engage in discussions and provide input regarding initial work products with the Santa Fe NF, other cooperating agencies, nongovernmental groups, and the general public. They also provided feedback on pre-draft and draft products, technical expertise, information on the Santa Fe NF's forest plan's consistency with their own management plans (where they exist), and represented the interests and needs of their constituents.

Involving cooperating agencies in FPR provided a forum for maximizing the collective voice and interests of the communities and greater public around the national forest. The Santa Fe NF benefited from cooperating agencies' knowledge and understanding of the concerns and needs of local communities in northern New Mexico. Both parties also benefited from better communication and representation to the public and constituents.

Public Involvement

The Santa Fe NF conducted public outreach meetings during the various phases of the FPR process, including listening sessions (2014), USDA cadre meetings (2014), Assessment (2014), need for change (2015), field trips (2016), initial plan components (2017), alternatives and management areas (2017), wilderness recommendation process (2016–2018), and open houses leading up to the draft Plan and draft environmental impact statement (DEIS) release (2016–2018).

Following guidance given in the 2012 Planning Rule, public engagement for the Santa Fe NF has emphasized collaboration with tribes, cooperating agencies and private landowners, youth engagement (including low-income and minority youth), and outreach to a wide range of users as well as local, regional, and national groups.

The Santa Fe NF's vision of robust public engagement originated from conversations with the public at the beginning of the revision process in 2014. From that, seven themes emerged that influenced the public participation design and strategy.

Concern Statement 1	Many people want to work with the Santa Fe NF, engaging early and often.
Concern Statement 2	Relationships and trust need attention.
Concern Statement 3	Stakeholders desire a clear understanding of their role in the decision-making process, especially concerning their influence in the process and how their comments are addressed.
Concern Statement 4	Create safe opportunities for shared learning among diverse stakeholders by using a third-party facilitator, being inclusive, and having "meaningful meetings" with a clear focus and purpose.

Concern Statement 5 Education is important.

Concern Statement 6 Culture, history, and place attachments run deep in northern New Mexico.

Concern Statement 7 Good communication is essential. Be open and transparent; be timely in

responses; speak plainly; and use multiple communication methods including emails, letters, phone calls, social media, local media outlets, website, field trips, and summaries of materials with visuals and graphs.

Our public engagement process included over 250 meetings in local communities; technical meetings, including a symposium; and field trips; at least 3,200 people participated. Most meetings were general, open-house style public meetings on weeknight evenings or the weekends to accommodate many people's work schedules. Meetings were typically 2 hours long and provided opportunities for people to be informed of—and engaged throughout—the plan revision process. Technical meetings were opportunities for cooperating agencies, natural resource professionals, non-profit groups, Santa Fe NF specialists, and public citizens to collaboratively work on plan revision in a multi-disciplinary way. These meetings were typically longer than general meetings, occurred during the workday, and had more specialists present to answer a diversity of questions in greater depth. A series of field trips took place as plan development started; these were opportunities for the public to see a variety of resources that were and were not meeting desired conditions and to talk about what desired conditions might look like. Conversations at these meetings and comments submitted throughout FPR influenced the final Plan.

Additionally, the Santa Fe NF engaged in 34 outreach tabling events to raise awareness and add a wide variety of individuals and groups to the FPR mailing list. Events included county fairs, farmers' markets, the Balloon Fiesta, the State Fair, Health and Family Days, and others where the FPR team staffed an informational table with handouts about the FPR process, encouraging people to sign up for the mailing list and answering questions. The mailing list, which now connects to well over 2,000 interested or involved persons, includes local, regional, and national groups; Federal, State, and local governments; federally recognized tribes and pueblos; rural historic communities; land grant-merced and acequia governing bodies; rural historic communities; non-profit organizations; private landowners; youth; and other public citizens.

We also engaged specifically with youth, including 23 classes taught at local elementary, middle, and high schools—as well as through field trips. The Santa Fe NF led two field trips with Aspen Community Magnet School fourth grade students (many of whom are low income and minorities) to public lands to learn about natural resources and their management through an "Every Kid in a Park" grant. Engagement with college-level students included working with forestry professors at New Mexico Highlands University to give guest lectures and encourage college students to attend public meetings in Las Vegas, New Mexico, and a week-long immersion program for underprivileged natural resource students to learn about resource management in new ecosystems.

The Santa Fe NF also conducted specific outreach to the land grant and grazing communities, which have a long history with the forest and depend upon forest resources and rangelands managed by the Santa Fe NF for traditional and cultural practices, including cattle grazing. The FPR team held eight meetings with these communities between 2014 and 2018, four with the Northern New Mexico Stockman's Association and four with land grants. Additionally, specific outreach to permittees was done for public meetings, with letters in both English and Spanish and the Land Grant Council participated in the FPR process as a cooperating agency.

Preceding the official 90-day comment period (begun on August 9, 2019) and extending well into the comment period, the Santa Fe NF planning team held or attended an additional 30 meetings with Tribes and Pueblos, cooperating agencies, local government officials and community groups, non-profit organizations, and the public to discuss multiple methods for delivering and drafting official comment responses and an overview of draft plan content and the associated DEIS. Additionally, three tri-forest meetings were held collaboratively with the Carson and Cibola NFs: one for Tribes and Pueblos, one for the general public, and one for government officials. The Santa Fe NF planning team attended a public meeting individually hosted by each of the other national forests and attended an information session for formal commenting held by two local non-profit groups as well.

The draft record of decision, final land management plan, and associated final environmental impact statement documents were published on September 2, 2021, initiating a 60-day objection filing period. The 60-day opportunity to object ended on November 2, 2021. The Santa Fe NF received 15 eligible objections. Objection issues covered many topics such as wildlife species management; the amount, location, and management of recommended wilderness; the recreation opportunity spectrum; management of the Continental Divide National Scenic Trail; and other concerns.

Following a comprehensive objection review, the Southwestern Regional Forester hosted objection resolution meetings over three days, March 15 through 17, 2022. The Southwestern Regional Forester's written response to the objection issues was issued on May 24, 2022. The set of instructions that I received as part of that response and the actions that were taken to resolve them are detailed in the Administrative Review and Objections section of this ROD. The Forest Service also considered further changes in response to objections and agency review, in addition to addressing the instructions. These were all minor corrections to the text or maps in the final Plan. After the forest plan is finalized, the Santa Fe NF will continue to build on the successful collaboration established throughout forest plan revision in future planning and decision-making activities. The forest plan will empower a more strategic use of existing partnerships that better aligns the interests of partners and the public and helps to create new and more effective partnerships.

A full list of public engagement activities can be found in appendix H of the FEIS.

Decision and Rationale for the Decision

Decision

I have reviewed the environmental analysis disclosed in the FEIS, the planning record, comments from our State and local government partners, federally recognized tribes, other Federal agencies, and the public and considered how the Plan meets the identified needs for change and the requirements of 36 CFR 219. Based on this review, I selected alternative 2 as described in the Santa Fe National Forest Land Management Plan and the accompanying FEIS. The selected alternative is based on alternative 2 from the DEIS, with modifications in response to public comments and internal review reflected in the FEIS as the preferred alternative. With this decision, I am further modifying the preferred alternative 2, the FEIS, and the final Plan to address the concerns raised by objectors. This final version of the Plan incorporates adjusted recommended wilderness boundaries and plan components that were modified to improve clarity and consistency. The FEIS was modified to improve the clarity of the analysis, particularly in regard to effect determinations for at-risk listed species and at-risk species of conservation concern.

The final Plan addresses the needs for change identified during the assessment; meets the requirements of the Planning Rule at 36 CFR 219; is responsive to local government, tribal, and public engagement; and is based upon over 30 years of knowledge gained from implementation and amendment of the 1987 Forest Plan.

By this decision, I approve the following:

- 1. Forestwide (chapter 2) and area-specific (chapter 3) plan components, including desired conditions, objectives, timber suitability, standards, and guidelines that meet the social, economic, and ecological sustainability requirements of the 2012 Planning Rule.
- 2. Identification of management areas, including: the Caja del Rio Wildlife and Cultural Interpretive Management Area, the Cañada Bonita Recommended Research Natural Area, Cultural Interpretive Management Areas, the Oil and Gas Leasing Management Area, eligible Wild and Scenic Rivers, and Recommended Wilderness.
- 3. Five areas (23,845 acres) recommended for inclusion in the National Wilderness Preservation System: (1) Dark Canyon Wilderness Addition; (2) White Rock Wilderness Addition; (3) Thompson Peak Wilderness Addition; (4) Enchanted Lakes Wilderness Addition; and (5) Grace Tract Wilderness Addition.
 - 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. The Congress has reserved the authority to make final decisions on the wilderness designation. Plan implementation is not dependent upon subsequent action related to recommendations for wilderness designation. Plan direction for recommended wilderness identifies suitable uses and provides direction to allow for some activities needed for the administration of the area and for ecological restoration of at-risk species.
- 4. Identification of 12 river segments (74 miles) eligible for inclusion in the Wild and Scenic Rivers System and plan components associated with their management.
- 5. Plan components that apply to designated areas, including Wilderness, Wild and Scenic Rivers; the Jemez National Recreation Area; Significant Caves; the Continental Divide National Scenic Trail; Inventoried Roadless Areas; National Recreation Trails; National Historic Trails; Research Natural Areas; Scenic Byways and Wild Horse and Burro territories. These are included in the "Designated Areas" section of chapter 3 in the Plan.
- 6. The monitoring program in chapter 5.
- 7. Identification of 356,716 acres as suitable for timber production.
- 8. Other plan content, such as the description of the distinctive roles and contributions of the Santa Fe National Forest.

Overall Benefits of the Plan

The Plan provides the following benefits:

• A 5 percent increase in jobs (to 1,269 annually) and total annual labor income (\$44.7 million) from current.

- Increasing active management including forage; annual timber (14.6 million board feet) and fuelwood (7,133 cords; a 150 percent increase from current); and traditional uses important for rural prosperity.
- Addressing sustainable recreation, including fishing and hunting.
- Maintenance of access on the existing over 2,200 miles of public roads and 1,086 miles of system trails.
- Addition of 5 new recommended wilderness areas (23,845 acres, a 7.8 percent increase to current recommended wilderness, all within existing IRAs) and 12 new eligible wild and scenic rivers (74.2 miles; 100 percent increase from current eligible [0 miles]).
- Managing the risk of uncharacteristic wildfire and restoring community watersheds by improving the health and function of forested lands (37,225 acres prescribed and natural fire planned; a 145 percent increase from current) and riparian areas.

Nature of the Decision

The purpose of the forest plan is to guide future projects, activities, practices, uses, and protection measures to ensure sustainable multiple-use management on the Santa Fe NF for the next 15 years. The forest plan is strategic in nature; it does not authorize projects or activities, commit the Forest Service to take action, or dictate the day-to-day administrative activities needed to carry out the Forest Service's internal operations (such as personnel matters, law enforcement, or organizational changes). The forest plan programmatic management direction will be implemented through the design, execution, and monitoring of site-specific activities, such as relocating a trail, conducting a prescribed burn, or harvesting timber. The decisions for these project-level activities must be consistent with the strategic direction set forth in the Plan (36 CFR 219.15). Site-specific analysis in compliance with the National Environmental Policy Act (NEPA) will need to be conducted for prohibitions or activities to take place on the ground, in compliance with the broader direction of the Plan.

The Plan establishes plan components in the form of desired conditions, goals, objectives, standards, guidelines, and land suitability to provide for ecological integrity and contribute to social and economic sustainability, including through provision of ecosystem services and multiple-uses of the Santa Fe NF. Through development of plan components and unit-level monitoring, we incorporated best available scientific information and created an adaptive management framework for implementation. The architecture and components of the plan are intended to enable us to adapt to new social and economic opportunities that arise, as well as new information we gain through science and monitoring.

Rationale for the Decision

Based upon my review of all alternatives, I decided to implement the preferred alternative 2, as modified in response to objections and agency review, as this alternative best meets the purpose and need for change and provides the best mix of land and resource uses that meets public needs while moving the Santa Fe NF toward its desired conditions. I carefully considered the requirements of the National Forest Management Act and this alternative reflects the best overall arrangement of multiple uses, while maintaining the long-term health and productivity of the land. I also took into consideration the best available science when making my decision.

The broad framework for the interconnected management of resources provides for sustainable uses that support vibrant communities and honor the Santa Fe NF's traditional communities, while also adapting to 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.

When compared to the other considered alternatives:

- Alternative 2 addresses the need to recognize and enhance the Santa Fe NF's role in contributing to local economies, including timber and fuelwood (14.6 million board feet and 7,133 cords, respectively; a 150 percent increase from current), forage for livestock grazing, the service-based sectors of recreation and tourism, and other multiple-use activities and products. It will support an overall 5 percent increase in jobs (to 1,269 annually) and total annual labor income (\$44.7 million) from current.
- Alternative 2 maintains access on existing public roads (over 2,200 miles) and system trails (1,086 miles).
- The distribution of Santa Fe NF resources under alternative 2 provides for restoration and diverse ecosystem services and allows for adaptive management.
- Compared to the previous plan, there is an increased focus on improving infrastructure and
 increasing the level of ecological restoration, such as more timber volume than the current
 plan and objectives that emphasize returning vegetation to reference conditions using
 silvicultural and fire treatments.
- Alternative 2 recognizes and values traditional communities and uses, reflecting the forest's contribution to local cultural, social, and economic vitality.
- Unique places on the Santa Fe NF are recognized for their contributions to watershed function, wildlife habitat, outdoor recreation, grazing, and other multiple uses and economic benefits.

The decision represents a mix of recommended wilderness areas and lands identified as suitable for timber production and includes provisions for active management of vegetation, including fuel reduction, and eligible wild and scenic rivers.

Since July 2017, the Santa Fe NF has worked closely with our cooperating State, local, and tribal government cooperating agencies, as well as with other Federal agencies and the general public. The Plan is the result of that collaboration and includes perspectives and language developed by a broad range of forest users and interested parties. While the Plan cannot commit the public to act, plan direction emphasizes working through partnerships to work across boundaries, build consensus, and increase capacity. My decision to develop and select the preferred alternative, alternative 2, was based on discussion and comments from these stakeholders; the Plan is generally consistent with the interests of many of these stakeholders. My decision includes the recommended wilderness areas with the most support both from the public and from the perspective of successful on-the-ground management. There was also a wide array of recommendations around specific sites or plan components for individual issues. Where possible, the Plan was modified to accommodate these requests; otherwise, the Santa Fe NF determined that the plan components were sufficient to meet our obligations under the 2012 Planning Rule.

The Plan includes plan components (desired conditions, objectives, standards, guidelines), management approaches, and a monitoring plan that reflect the key roles and contributions of the national forest and address needs for change from the 1987 Forest Plan. My decision is based on how the preferred alternative addresses key themes that emerged from the assessment of Needs for Change (USDA Forest Service 2016f), which include the following:

Delivering Socially and Economically Valued Products – In the culture of northern New Mexico, economic prosperity is often inseparable from subsistence uses tied to natural resources and the land, such as timber, including fuelwood; livestock forage; and water for surrounding communities. The Plan recognizes the Santa Fe NF's continued contribution to social and economic benefits desired by local communities, families, and visitors. It is grounded in the economic and subsistence uses and values of unique local cultures. With my decision, I incorporated socioeconomic monetary and subsistence values throughout the Plan, including in the Forest Products section, the Sustainable Livestock and Grazing section, and the Recreation section.

The Plan provides opportunities for economic growth while sustaining ecosystems for future generations. It focuses on restoration and diverse ecosystem services that contribute to the long-term socioeconomic diversity and stability of local communities. The Plan boosts rural prosperity for communities surrounding the Santa Fe NF by contributing a 5 percent increase in forest management-related annual jobs (1,269) and labor income (\$44.7 million). Plan direction supports sustainable levels of timber products for local industries and subsistence and traditional uses. A 9.2 percent increase in suitable timber lands (to a total of 356,716 suitable acres) and objectives for an annual average of 15,000 acres of mechanical vegetation treatments (120 percent increase) would increase annual timber production by 150 percent to 14.6 million board feet and 7,133 cords of fuelwood.

Sustainable rangeland forage and livestock grazing contributes to the long-term socioeconomic diversity and stability and cultural identity of local communities. My decision supports the continuation of these practices through forested and non-forested vegetation treatments that will increase grass and forb abundance, thereby providing increased forage for livestock grazing. Plan direction supports watersheds that are functioning properly, resilient to disturbance, support multiple uses, and have high water quality.

Addressing Sustainable Recreation and Access – Recreation and its importance to people and the economy, as well as continued access to the forest, was addressed throughout the Plan in the Recreation section, the Designated and Management Areas section, and the Roads section. Plan direction supports sustainable recreation management to provide high-quality recreational experiences, while also balancing changing trends in services. The Plan aims to ensure sustainable use of recreation infrastructure and facilities, including roads. Impacts from recreation activity are managed to reduce user conflict and resource damage, especially at dispersed campsites. Objectives help maintain developed campsites and access on over 2,200 miles of public motorized routes and 1,086 miles of system trails. Scenery distance zones are used throughout the forest plan to describe where plan components apply and are defined using a distance range (i.e., foreground, up to 0.5 mile). Landscape visibility is based both on this distance range and the seen area (accounting for topographic obstructions), consistent with the Landscape Aesthetics Handbook (USDA FS 1995).

In my decision, I considered concerns from the mountain biking community regarding recommended wilderness. During the analysis portion of the recommended wilderness process, restricting mountain biking was considered an untenable tradeoff—areas known to be in frequent use by mountain bikers were not carried forward into the final recommended wilderness selection.

Given the numerous public access roads already on the forest, I chose not to include the motorized recreation management areas, presented in alternative 4, as part of my decision. Alternative 2 does not decrease motorized recreation or access to the forest to a greater degree than alternative 4, but does preclude the potential of adding public access routes in recommended

wilderness areas. It also focuses on managing and reducing roads that are not on the public motor vehicle use map; this is to reduce the adverse ecological impacts of roads, which could disrupt other uses of the forest, as well as reduce safety hazards.

Supporting Traditional Communities and Uses – Forests in northern New Mexico have been central to the culture and traditions of surrounding communities for centuries. Ensuring that traditional uses of the forest can continue has been a key public concern. We met with land grants, acequia associations, and tribal governments, as well as people from communities around the forest, to collaboratively craft language that meets community needs. This effort can be seen in the Rural Historic Communities and the Federally Recognized Tribes section of the Plan, as well as in the Cultural and Historic Resources section, the Sustainable Livestock and Grazing section, and the Forest Products section.

In the Rural Historic Communities section, land grant communities and acequia associations are recognized as a political subdivision of the State of New Mexico with specific plan components that value their unique history and uses of NFS lands and management approaches that describe a collaborative, respectful, and mutually beneficial relationship with the Forest Service. Traditional uses of NFS lands are described in the Northern New Mexico Traditional Communities and Uses section but direction for their management is found throughout the final Plan, including in the Vegetation, Watersheds and Water Resources, Roads, Recreation, Special Uses, and Partnerships sections, among others.

The importance of allowing opportunities for traditional communities to be engaged with the Santa Fe, so that sustained use of the national forest for cultural and subsistence needs are supported, is an underlying theme. Direction related to traditional communities and uses requires the forest to provide sustainable grazing, fuelwood, water for irrigation (acequias), and other forest products, and to make those resources available to rural historic communities and tribes for cultural and traditional needs, subsistence practices, and economic support. Mechanical treatments of ponderosa pine and mixed conifer with frequent fire communities are expected to result in a sustainable flow of wood products to local and regional wood-processing and biomass industries and provide fuelwood for local families and forest products for traditional and cultural purposes. The final Plan also provides protection to those places that are spiritually or culturally important and provides opportunities for integrating forest management with tribal needs through shared stewardship to address threats to adjacent tribal resources.

Part of my decision is explicitly aimed at supporting traditional communities and uses, specifically, the consistency between the Santa Fe NF's Plan and those of the Carson and Cibola NFs. This work was directed by the Southwestern (R3) Regional Forester in recognition of the importance of consistent management to the region's traditional communities, including federally recognized tribes, Spanish and Mexican land grants-mercedes, acequia associations, grazing stakeholders, and other rural historic communities. Through this consistency effort, all three forest plans recognize historic and contemporary cultural resources, uses, and practices important to tribes and pueblos, land grant communities, acequia associations, and other communities with historic, cultural, and social connections to lands managed by the forests, but which pre-date the establishment of the Forest Service. There is also a high level of consistency in plan direction for other sections, including sustainable rangelands and livestock grazing, traditional use of forest products (fuelwood, construction materials), vegetation, restoration of fire, and some shared designated areas such as the Continental Divide National Scenic Trail and wilderness. Inconsistent sections of the plans, such as management areas, are necessary to adapt to each national forest's unique circumstances.

Partnerships – The Plan recognizes the interdependence of resources and supports an "all-lands" approach to working with neighboring land managers to implement projects that improve landscape connectivity across mixed ownerships where natural systems span multiple administrative boundaries. In the Plan, direction for partnerships provides the vision of a collaborative network, open communication, and landscape-scale management across administrative boundaries. There is an emphasis on the need to build stronger relationships with elected officials, cities and counties, Federal and State agencies, tribal governments, land grant and acequia associations, traditional and rural communities, recreational and forest user groups, environmental groups, youth, and vendors.

Designated Areas and Management Areas – Designated and management area direction has precedence over any overlapping forestwide direction. Designated and management areas differ in terms of their origination (designated areas are established by, or pursuant to, statute, regulation, or policy; management areas were developed as part of the plan revision process) but in the land management plan context they serve a similar purpose of describing management that differs from forestwide direction and is not met through forestwide plan components. The Plan manages existing designated areas to preserve the characteristics for which they were designated. This includes four designated wildernesses (292,329 acres; 18.5 percent of the forest), 55 inventoried roadless areas (241,730 acres, 15 percent of the forest), 99.6 miles of designated national trails, and three designated wild, scenic, and recreational rivers (60.5 miles).

The Plan additionally recommends five new wilderness areas (23,845 acres, a 7.8 percent increase to current wilderness), all of which are within existing inventoried roadless areas. I selected these five areas based on a formal analysis and public comments received on the DEIS and throughout the wilderness recommendation process. In response to objections received on the final plan and final EIS, I re-evaluated the Thompson Peak Recommended Wilderness Management Area in the context of new information about active mining claims in the area. After a careful re-evaluation and analysis of the area to include the new information in the recommended wilderness process (refer to the project record), I changed the boundaries of the Thompson Peak Recommended Wilderness Management Area to exclude the active mining claim blocks. Activity around the mining claims could conflict with management of the area to preserve wilderness characteristics. This decision is based on the process documented in appendix J of the FEIS including input from forest specialists. Based on these edits, the total updated 23,845 acres of recommended wilderness remains within the analyzed range of alternatives as alternative 2 still contains a smaller Thompson Peak Recommended Wilderness Management Area (9,483 acres) than alternative 3 (21,849 acres), but larger than alternatives 1 and 4 (none recommended). The Plan also recommends 12 eligible wild, scenic, and recreational river segments (74.2 miles).

Other management areas (MA) in the Plan highlight some of the unique and special features of the Santa Fe NF. Desired Conditions for the Caja del Rio Wildlife and Cultural Interpretive Area promote the area's cultural and archaeological integrity, wildlife diversity and connectivity along the Rio Grande corridor, and related educational and recreational opportunities. Four cultural interpretive MAs have desired conditions for interpretive trails that limit impacts to pre-historic structures while maintaining their archaeological integrity. Standards and guidelines for the proposed Cañada Bonita Research Natural Area protect the best, and possibly only remaining, Therber fescue grassland in the Southwestern Region. The Oil and Gas Leasing Area provides stipulations that protect other resources from these activities within the only area of the Santa Fe NF that has oil and gas potential.

In this decision, I chose not to include two proposed management areas: the Wetland Jewels Management Area and the Holy Ghost Botanical Area. With regards to the Wetland Jewels, I decided not to include it as part of the decision because alternative 2 provides protections to all

riparian and wetland ecosystems that are commensurate with the proposed protections for the Wetland Jewels in alternative 3. Singling out specific wetlands as management areas would not significantly increase ecological protections and would decrease ease of management. In recognition of the strong feelings from some members of the public surrounding this proposed management area, language was added to the Plan emphasizing the importance of headwaters and working with partners on headwater wetland restoration.

Although there was less public comment on the Holy Ghost Botanical Area, there was concern that the Holy Ghost ipomopsis would not be adequately protected without this botanical area. However, specialists on the forest determined that drawing attention to the plant may in fact be detrimental to its continued existence, as increased traffic in the area could lead to trampling, collection, or habitat disturbance. Based on this expert opinion, I decided not to include this management area and instead rely on direction in our At-Risk Species section of the Plan to protect this iconic species.

Restoring Ecosystem Resiliency – I chose alternative 2 because it provides the Santa Fe NF the ability to conduct vegetation management actions (e.g., prescribed fire and mechanical thinning) to move vegetation toward desired conditions and protect resources. Many commenters were supportive of utilizing prescribed fire and wildfire to achieve or maintain desired conditions, and specifically noted desires to mitigate uncharacteristic or catastrophic wildfire and protect the wildland-urban interface and essential water resources. These comments were taken into consideration along with those that were not supportive of active vegetation management or use of fire on the forest.

Plan direction for ecosystems support the return of natural disturbance processes (fire) that maintain or restore appropriate vegetation and structure, thereby improving wildlife habitat and reducing uncharacteristic wildland fire. The Plan emphasizes returning vegetation to reference conditions in frequent-fire adapted forested and non-forested types using silvicultural treatments (average 15,000 acres annually) and fire (prescribed and natural, average 32,500 acres annually) to protect life and property, as well as cultural and ecological resources.

While active vegetation management may have potential for environmental effects and social conflicts, there is broad public support for actively managing the forest for improved ecosystem health and resilience in the face of a changing climate and the lasting impacts of past fire suppression. I am confident that the plan components in alternative 2 will strike the right balance to ensure long term-productivity and sustainability.

Maintaining Species Diversity– The Plan provides for a diversity of plant and animal communities, commensurate with the suitability and capability of the Santa Fe NF, by restoring and maintaining ecological integrity. Consistent with the 2012 Planning Rule, the Plan adopts a complementary ecosystem- and species-specific approach to maintaining species diversity (36 CFR 219.9).

Four federally recognized species (three endangered and one threatened) are found in the Santa Fe NF and rely on the forest for most or all of their natural life-cycle requirements. These include the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), Mexican spotted owl (*Strix occidentalis lucida*), Jemez Mountain salamander (*Plethodon neomexicanus*), and the Holy Ghost ipomopsis (*Ipomopsis sancti-spiritu*). Under alternative 2, these species will be managed according to recovery plans developed by the U.S. Fish and Wildlife Service (USFWS) that outline critical habitat and ecological conditions necessary to facilitate their protection and recovery. The Regional Forester identified a total of 32 SCCs for the Santa Fe NF: 1 amphibian; 8 birds; 3 fish; 3 invertebrates; 6 mammals; and 11 plants. These SCCs were determined to be at

risk due to small or endemic populations, limited habitat, current degraded habitat or specific ecological conditions, or current Forest Service management activities or other threats that may result in negative impacts to the species.

Fine-filter (i.e., species-specific) components have been included in the Plan when additional management direction is necessary to maintain these at-risk species that are vulnerable to decline. Throughout the final Plan and FEIS, plan components were developed and evaluated based on their ability to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain the persistence of viable populations of species of conservation concern.

Direction specifies appropriate habitat conditions to support native aquatic, terrestrial, and at-risk species, while providing protections from management activities that impact breeding, nesting, and critical habitat. Terrestrial and aquatic habitat improvement (5,000 acres and 3 miles per year respectively) and restoration in forested and non-forested vegetation types and riparian areas would also improve habitat conditions. The Plan also provides guidance on managing invasive species on the forest through treatment that protects native fish from nonnative fish and that either suppresses or eradicates invasive plants, with an objective to treat 600 acres of invasive plants annually.

In my decision, I considered concerns raised by commenters that alternative 2 does not adequately address habitat connectivity and its importance to species viability. In the Plan, connectivity is supported by a multitude of components, including desired conditions for vegetation structure and composition, wildlife habitat characteristics, and standards and guidelines for aquatic and terrestrial connectivity. Improved vegetation leads to improved terrestrial wildlife habitat and connectivity. This integration is recognized with the objective to restore or enhance at least 50,000 acres for terrestrial wildlife habitat improvement. Barriers to movement are minimized by Plan direction, except where they benefit species management and recovery (e.g., barriers to keep out invasive species). Plan direction also promotes wildlife connectivity through wildlife passages with new or reconstructed fencing and infrastructure to improve habitat connectivity.

The above elements of the Plan improve habitat configuration and availability to allow long-distance range shifts of plant and wildlife populations (e.g., to accommodate changing climatic conditions) and provide for ecological connectivity at multiple temporal and spatial scales. I also considered landscape linkages in my decision—the amount and distribution of recommended wilderness areas and designated wilderness will combine to provide secure habitat for the full array of wildlife species on the forest. Additionally, as part of my decision, I included the Caja del Rio Wildlife and Cultural Interpretive Management Area; this area is noted both by Forest Service resource specialists and by the public as a key wildlife movement corridor.

In summary, I believe the Plan, alternative 2, sets the framework for future decisions more effectively than the other alternatives because it best addresses the themes that emerged from the needs for change to the 1987 plan; it is overall best in achieving desired conditions and therefore in providing for social, economic, and ecological sustainability on the Santa Fe 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.

Requirements of the Planning Rule

219.8 Sustainability

The Plan has been prepared in compliance with the Forest Service's 2012 Land Management Planning Rule at 36 CFR Part 219. The Plan meets the specific Rule requirements at sections 219.8 through 219.12 as follows.

The final Plan provides for ecological sustainability by including plan components that collectively ensure the maintenance or restoration of the coarse- and fine-filter habitat needs of all native species, while also maintaining or restoring the natural processes and functions on the landscape. Specifically, the Plan includes the following plan direction:

- Maintaining and restoring the ecological integrity—including structure, function, composition, and connectivity—of terrestrial and aquatic ecosystems and watersheds in the plan area (FW-VEG and FW-WATER sections and subsections). These ecosystemand species-specific plan components provide suitable habitat for aquatic, plant, and wildlife at-risk species. Collectively, these plan components incorporate a landscape approach to species persistence and recovery.
- 2. Maintaining and restoring air quality (FW-AIR).
- 3. Maintaining and restoring soils and soil productivity including guidance to reduce soil erosion and sedimentation (FW-SOIL).
- 4. Maintaining and restoring water resources and water quality (FW-WATER section and subsections).
- 5. Maintaining and restoring the ecological integrity of riparian areas in part by establishing riparian management zones around all lakes, streams, and open water wetlands (FW-RWE section and subsections).
- 6. Ensuring implementation of best management practices for water quality (FW-WATER-S-1).

The Plan provides for social and economic sustainability by:

- 1. Recognizing and valuing traditional needs and uses by federally recognized tribes, land grant communities, acequia associations, and other rural historic communities (FW-TRIBES, FW-RURALH, FW-ARCH, FW-RANGE, FW-FORESTRY).
- 2. Facilitating opportunities for local employment and economic development associated with restoration, grazing, recreation, mineral development, and other multiple uses and ecosystem services (FW-TRIBES, FW-RURALH, FW-RANGE, FW-FORESTRY, FW-REC, FW-RECSU, FW-LANDSU, FW-MINERALS).
- 3. Providing surface and groundwater for many uses throughout the state, including those that contribute to economic growth and ecosystem integrity (FW-WATER, FW-AQUASH, FW-TRIBES, FW-RURALH).
- 4. Supporting a variety of high-quality developed and dispersed recreation opportunities for a diverse group of forest users that are responsive, sustainable, and contribute to the economic, cultural, and social vitality and well-being of surrounding communities (FW-REC section and subsections, FW-RECSU).

- 5. Providing safe and reasonable access via sustainably designed, well-marked, and well-maintained roads, bridges, and trails (FW-ROADS, FW-REC section and subsections).
- 6. Preserving and protecting cultural and historic resources (FW-ARCH).
- 7. Sustaining scenic character in ways that contribute to visitors' sense of place and connection with nature (FW-SCENIC).
- 8. Protecting communities and ecological resources from wildland fire (FW-FIRE).
- 9. Advancing partnerships and collaboration to manage forest resources, assist in communicating with and educating the public, and achieve short- and long-term mutually shared goals (FW-PARTNER).

219.9 Diversity of plant and animal communities

The Plan manages for plant and animal species that are healthy, well-distributed, genetically diverse, and connected, enabling species to adapt to changing environmental and climatic conditions. It also protects and restores rare and unique resources that support high levels of biodiversity such as springs, wetlands, aspen forests, and habitats and refugia for species that are narrow endemics or have restricted distributions or declining populations. The final plan adopts a complementary ecosystem (coarse-filter) and species-specific (fine-filter) approach to maintaining the diversity of plant and animal communities and the persistence of native species in the plan area by:

- 1. Maintaining and restoring ecosystem integrity and diversity as described above, including rare plant and animal communities and diverse native tree species (FWTERRASH, FW-AQUASH, FW-ATRISK).
- 2. Including additional species-specific plan components where ecosystem components do not adequately contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area (Appendix E of the FEIS contains a crosswalk of fine-filter plan components and management approaches by species).
- 3. Promoting habitat connectivity and availability to allow wildlife populations to adjust their movements in response to major disturbances and minimizing barriers to movement with new or reconstructed fencing and infrastructure to improve habitat connectivity (FW-RWE, FW-AQUASH, FW-TERRASH, FW-RANGE, FW-ATRISK, FW-ROADS, MA-CAJA; Appendix E of the FEIS contains a crosswalk of all plan components and management approaches that relate to habitat connectivity).

219.10 Multiple use

The Plan recognizes and identifies key relationships among various multiple uses. Plan components are integrated to recognize the interdependence of ecological resources and are based on the need for integrated consideration of ecological, social, and economic factors. Integrated and adaptable resource management promotes the Santa Fe NF's ability to remain relevant and responsive to changing user demands, while also being economically feasible and productive.

The final plan provides for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish, within Forest Service authority and the inherent capability of the plan area by:

- 1. Integrating management for multiple uses across resources.
- 2. Considering multiple uses during the public participation process that identified relevant resources and uses throughout plan development (documentation of the public participation process is included in appendix H of the FEIS).
- 3. Maintaining and restoring vegetation conditions, soils, and riparian areas to ensure multiple benefits, including biodiversity, wildlife habitat, and resilience to natural disturbance (FW-VEG, FW-SOIL, FW-WATER, FW-RWE).
- 4. Maintaining and restoring watershed conditions for provision of water for beneficial uses through an integrated aquatic and riparian resource management approach (FW-WATER, FW-RWE).
- 5. Recognizing and protecting cultural, historical, and traditional resources and uses, including areas of tribal importance, and incorporating traditional knowledge into project design and decisions (FW-TRIBES, FW-RURALH, FW-ARCH).
- 6. Providing for a collaborative, respectful, and mutually beneficial relationship between the Santa Fe NF and land grant communities and acequia associations, valuing their unique history and uses of the forest (FW-PARTNER, FW-RURALH).
- 7. Providing rangeland for livestock grazing that contributes to agricultural businesses, local employment, livelihoods, as well as generational ties to the land (FW-RANGE).
- 8. Providing fuelwood and other forest products that contribute to the long-term socioeconomic diversity and stability of local communities (FW-FORESTRY).
- Providing a variety of sustainable, high-quality, developed and dispersed recreation
 opportunities and activities to a diverse group of forest users (FW-REC section and
 subsections).
- Providing motorized opportunities and access, as well as non-motorized and primitive areas (FW-ROADS and FW-REC sections and subsections, DA-WILD, DA-IRA, DA-JNRA, MA-RECWILD, MA-CAJA).
- 11. Protecting congressionally designated wilderness areas and areas recommended for designation (DA-WILD, MA-RECWILD).
- 12. Protecting designated wild and scenic rivers and rivers found eligible for designation (DA-WSR, MA-ELIGWSR).
- 13. Protecting proposed research natural areas (MA-CANBON).
- 14. Providing opportunities for the development of mineral resources, where appropriate (FW-MINERALS, FW-LEASEMIN).

219.11 Timber requirements based on the National Forest Management Act

Based on National Forest Management Act requirements, the Plan identifies 356,716 acres as suitable for timber production. The purpose of timber production activities supported by this Plan is to restore native forests to desired conditions and provide wood products to local communities. Lands suitable for timber production were determined following 36 CFR 219.11(a) and Forest Service Handbook direction (1909.12 chap. 61). Under the Plan, approximately 356,716 acres are suitable for timber production, while the remaining approximately 1,187,942 acres are not suitable for timber production.

Group-selection harvesting combined with periodic selection or variable density thinning will help achieve restoration objective, maintain habitat connectivity, and contribute to a dependable flow of forest products to existing and prospective local industry.

The Plan provides guidance for timber management by:

- 1. Identifying 356,716 acres in the plan area that are suited for timber production (FW-FORESTRY and appendix C of the FEIS).
- 2. Prohibiting timber harvest for the purpose of timber production on lands not suited for timber production (FW-FORESTRY-S-1).
- 3. Limiting timber harvest to only those lands where soil, slope, and/ or other watershed conditions would not be irreversibly damaged (FW-FORESTRY-S-2).
- 4. Requiring that timber harvest be carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and aesthetic resources (FW-FORESTRY-S-2).
- 5. Limiting the size of openings that may be cut during one harvest operation with standards describing particular conditions under which exceptions for larger openings may be allowed (FW-FORESTRY-S-4).
- 6. Limiting the quantity of timber that may be sold from the national forest (FW-FORESTRY-S-3).
- 7. Limiting regeneration harvest of even-aged stands of trees to stands that have reached or surpassed 95 percent of the culmination of mean annual increment (FW-FORESTRY-G-1).

219.12 Monitoring

I recognize the importance of applying an adaptive management approach to plan implementation and tracking our progress over time. Therefore, the Plan includes a robust monitoring program (36 CFR 219.7 (c)(2)(x) and 219.12) that is designed to test our assumptions, track relevant conditions over time, measure our management effectiveness, and evaluate the effects of our management practices. The plan monitoring program (chapter 5 of the final Plan) addresses what I believe to be the most critical components of informed management of the Santa Fe NF's resources that are within the financial and technical capability of the agency. Every monitoring question links to one or more desired conditions, objectives, standards, or guidelines. However, not every plan component has a corresponding monitoring question.

This monitoring program is not intended to depict all monitoring, inventorying, and datagathering activities undertaken on the forest, nor is it intended to limit monitoring to just the questions and indicators listed in chapter 5 of the final Plan. Consideration and coordination with broader-scale monitoring strategies adopted by the regional forester, multi-party monitoring collaboration, and cooperation with state and private forestry as well as research and development, as required by 36 CFR 219.12(a), will increase efficiencies and help track changing conditions beyond national forest boundaries to improve the effectiveness of the plan monitoring program. In addition, project and activity monitoring may be used to gather information for the plan monitoring program where it provides relevant information to inform adaptive management.

The monitoring questions in chapter 5 of the Plan address each of the eight required monitoring categories (36 CFR 219.12(a)(4)). Within these categories, key ecological characteristics in the plan area and objectives from the final plan focus available monitoring resources. These include improving watershed function and wildlife habitat, particularly aquatic and riparian habitats, as well as fire and fuels management and the restoration of frequent fire forests. In addition, the monitoring program addresses key socio-economic metrics, such as visitor use.

Details of the plan monitoring program—including monitoring and analysis protocols, data collection schedules, responsible parties, and data management—will be part of a separate monitoring guide. Because data sources and frequency of updates are likely to change over the life of the plan, the specific monitoring process is more appropriately included in a monitoring guide, instead of in the plan itself. We currently work with other Federal, State, and local agencies and stakeholder groups to complete monitoring and expect those partnerships to continue and increase in the future. The specific roles of partners in monitoring will be developed in more detail through the monitoring guide.

A biennial monitoring evaluation report will be prepared to indicate whether a change to the land management plan, management activities, or monitoring program may be needed—or whether a new assessment may be warranted, based on new information. This report will be made available to inform the public and to encourage feedback on the methods and how we are doing in meeting our plan goals. It is important to note that while monitoring results are expected to be reported biennially, not all monitoring questions are expected to be evaluated that frequently.

Components of the Decision

Preliminary Administrative Recommendations

Recommended Wilderness

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. The Congress has reserved the authority to make final decisions on wilderness designation. Plan implementation is not dependent on subsequent action related to recommendations for wilderness designation.

It is important to note that the initial inventory was intended to be reasonably broad and inclusive, based upon the inventory criteria, and that the inventory was not and is not a designation that conveys or requires a particular kind of management.

The FEIS analyzed a wide variety of alternatives, including an alternative with a large amount of recommended wilderness (alternative 3 with 270,130 acres) and an alternative that removes existing wilderness (alternative 4 with -68 acres; the 68 acres encompasses the San Gregorio Reservoir in the San Pedro Parks Wilderness). My decision is based on alternative 2, which identifies 23,845 acres as recommended wilderness. This represents managing 1.54 percent of the

Santa Fe NF as recommended wilderness in combination with designated wilderness comprising just over one-fifth (20.1 percent) of the forest.

Alternative 2 includes plan components to protect and maintain the wilderness character of designated wilderness areas and the ecological and social characteristics that provide the basis for each recommended area's suitability as wilderness. The Forest Service has an affirmative obligation to manage recommended wilderness areas for the social and ecological characteristics that provide the basis for their recommendation until Congress acts. The forest plan restricts uses in recommended areas that would affect the wilderness characteristics of these areas and possibly jeopardize their designation as wilderness in the future. Designated and recommended wilderness areas provide opportunities for solitude and non-motorized, non-mechanized recreation in an essentially unmodified environment.

Alternative 2 recommends five recommended wilderness areas. The Grace Tract area is the same as alternative 1. The Enchanted Lakes area differs from alternative 1 with the eastern half (427 acres) eliminated because it lower in terms of wilderness characteristics and the polygon extends south (480 acres) to take advantage of land acquired since the 1987 Forest Plan. Three additional polygons are added in alternative 2: Thompson Peak borders the existing Pecos Wilderness; Dark Canyon is north of the existing Rio Chama Canyon Wilderness and adjacent to a BLM Wilderness Study Area; and White Rock Canyon is across the Rio Grande from existing wilderness in Bandelier National Park.

As noted above, in response to objections received, the Thompson Peak area was re-evaluated to take into account three blocks of active mining claims that affected the manageability of the area. Upon reconducting the evaluation and analysis steps of the recommended wilderness process (see appendix A of this ROD), the Thompson Peak Recommended Wilderness Management Area that was proposed in alternative 3 remained the same, while the proposed alternative 2 management area excluded the areas with active mining claims. The exclusion of the mining claims ensured that the management area fit the alternative 2 recommended wilderness criteria with regards to manageability (see appendix J in the FEIS) and responds to concerns raised during the objections process that the mining claims were not taken into account during the original recommended wilderness evaluation and analysis. This new alternative 2 management area is the one I recommended to carry forward into the final Plan as the Thompson Peak Recommended Wilderness Management Area.

Table 1. Alternative 2 recommended wilderness areas and their respective acreages

Recommended Wilderness	Acreage
Grace Tract	944.99
Enchanted Lakes	925.12
Dark Canyon	2,217.69
Thompson Peak (boundary modified based on objections)	9,483
White Rock Canyon	10,274.10

The five recommended areas are appropriate as wilderness due to their largely remote and inaccessible locations and, in most cases, adjacency to existing wilderness. Recommendation of these areas has a low probability of conflicting with other management goals and multiple uses and has broad public support. I conclude that, on these 23,845 acres, the benefits to be obtained by recommending these areas to Congress for wilderness designation and managing them as recommended wilderness management areas (RWMAs) outweigh any associated limitations on management, such as community wildfire protection, ecosystem restoration, wildlife habitat

management, or provision of forest products. The RWMAs under alternative 2 include no designated mountain bike trails or motorized trails, nor any known active mining claims. This alternative strikes a balance between protecting wilderness values and the need to provide for multiple uses and retain management flexibility.

I arrived at my decision on recommended wilderness after extensive engagement with interested stakeholders—including local governments, tribes, and the public—and consideration of all sides of the issue. There are those who would like additional acres because of their values for places on the forest that they consider special or because they believe recommended wilderness management is the best strategy to protect wildlife and aquatic resources. There are also those that prefer that I don't recommend any additional areas, because they believe recommended wilderness management is too restrictive. As a land manager, I carefully considered a range of land management allocations, recreation uses, and boundary adjustments across the alternatives to determine the mix of land and resource uses that would best meet public needs. I believe the lands I am recommending have broad public support, provide high-quality areas for those who value wilderness characteristics, and minimize the effects of the inherent tradeoffs for those who value other management opportunities and allocations.

Wild and Scenic Rivers

This recommendation is a preliminary administrative recommendation that will receive further review and possible modification by the Chief of the Forest Service, Secretary of Agriculture, or the President of the United States. Congress has reserved the authority to make final decisions on designation of rivers as part of the National Wild and Scenic Rivers System.

In 2017, all rivers (243) on the Santa Fe NF were evaluated for free-flowing characteristics and outstandingly remarkable values (ORVs) to determine their eligibility. This evaluation identified 12 river segments (table 1), totaling approximately 74 miles, which were determined to be free-flowing and possess at least one ORV, thereby qualifying for inclusion in the National Wild and Scenic Rivers System (36 CFR 219.7(2)(v) and (vi)). The other 231 rivers were considered ineligible. A detailed document explaining the eligible wild and scenic rivers evaluation process is in the FEIS Volume 3, Appendix K: Documentation of Eligible Wild and Scenic Rivers Evaluation Process.

Eligible wild and scenic rivers must be managed to maintain the free flow and ORVs they possess at the time of eligibility unless a determination of ineligibility or non-suitability is made. If an eligible river is determined through a suitability study to be unsuitable, it shall no longer be considered eligible and plan direction in this management area will no longer apply. If an eligible river is determined to be suitable and is designated by Congress as a wild and scenic river, the designation would not affect existing water rights or the existing jurisdiction of states and the Federal Government, as determined by established laws.

The free-flowing character of eligible wild and scenic rivers is a regulating ecosystem service providing water to downstream sources. Free-flowing water can also be a supporting ecosystem service in the form of water cycling and a provisioning ecosystem service in terms of fresh water. The specific ORVs of each wild and scenic river can have different ecosystem services: scenic, recreational, historic, and cultural ORVs are cultural ecosystem services, while the fish ORV contributes to supporting ecosystem services.

Table 2. Eligible river segments in the Santa Fe NF including their location by ranger district, ORV(s), and length of the river segment

River Name	Forest District	ORVs	Classification	Miles
Canoñes Creek	Coyote	Recreation, Scenery, Prehistory, Botanical, Fish	Wild	9.98
Rio Guadalupe	Jemez	Scenery, Prehistory, Recreation	Scenic	13.23
Rio del Oso	Espanola	History, Prehistory	Recreational	10.22
Rito Anastacio East	Cuba	Scenery, Botanical, Fish	Wild	2.07
Rio Puerco	Cuba	Scenery, Botanical, Fish	Wild	8.33
Jemez River	Jemez	Prehistory	Wild	4.34
Pecos River	Pecos-Las Vegas	History	Scenic	6.75
Rio de las Vacas	Cuba	Scenery, Botanical, Fish	Wild	7.20
Rio Molino	Espanola	Fish	Wild	4.45
Rio Valdez	Pecos-Las Vegas	Fish	Wild	2.25
Beaver Creek	Pecos-Las Vegas	Fish, Scenery	Wild	3.05
Bear Creek	Pecos-Las Vegas	Fish	Wild	3.40

Based on a comprehensive study that included extensive public input, the final Plan adopts a revised evaluation of eligible rivers that compared river values to similar rivers in a defined region of comparison, updated free-flowing determinations based on current information, and accurately classified rivers found eligible based on existing levels of development. Alternative 2 provides clear direction for how to manage eligible rivers until a suitability determination is made. A summary of river classification criteria is included in the plan, with a more detailed description available in the evaluation of eligibility report. The plan clarifies the process for analyzing water resources projects and their effects on free flow.

Response to Public Comments on the Draft Documents

The Santa Fe NF published the notice of availability for the DEIS in the *Federal Register* on August 8, 2019. The 90-day comment period closed on November 7, 2019. The DEIS evaluated four alternatives, including no action, the draft plan, an alternative focused on natural processes, and an alternative focused on human uses.

We received 13,655 comment letters during the comment period; 251 were unique letters. The remaining letters were one of 25 versions of form letters initiated by wilderness and habitat connectivity advocates, traditional groups (Northern New Mexico Stockmen's Association, acequia associations), and/ or related to mining (particularly the Comexico exploratory drilling proposal in the Pecos Canyon) and a local, informal shooting area. Detailed comment letters were submitted by members of the public; acequia associations; the Land Grant Council; local, state, county, tribal, and federal governments (including Mora, Los Alamos, and Santa Fe Counties; Cuba Soil and Water Conservation District (SWCD); NM Highlands University; EPA); tribes and pueblos; and various organizations (American Rivers, nine sporting groups, Center for Biological Diversity, Sierra Club, The Wilderness Society, Theodore Roosevelt Conservation Partnership, Continental Divide Trail Coalition, Defenders of Wildlife, Earthkeepers, and others).

Key Concerns from Comments

Traditional Communities and Uses: There is long-standing mistrust among communities in northern New Mexico and land management agencies. Comments reflect the strong connections

between use of National Forest System lands and the economic, social, and cultural vitality of traditional communities. Concerns that those uses will be infringed upon in the future manifests as demands that the Plan protect preexisting rights, resolve land ownership disputes, and recognize perceived historical injustices.

Wilderness Recommendations: Some comments expressed a preference for no new recommended wilderness management areas (RMWAs). Others expressed concern that the forest was not doing enough to expand recommended wilderness and referenced a citizen proposal to expand the Pecos Wilderness (797 letters). The DEIS analyzed three alternatives with a range of RWMA recommendations, from no new RWMAs to RWMAs equal to about 18 percent of the Santa Fe NF (a 100 percent increase to current wilderness). Those opposed to RWMAs cited concerns with impaired watersheds, increased fire risks, and loss of access particularly for traditional uses like fuelwood collection. Several comments referenced a resolution against RWMAs from the Cuba Soil and Water Conservation District (Resolution #2019-4).

Wildlife: Comments expressed strong support for wildlife and asked for more protections and improved connectivity in the Plan. The majority of comments (11,502) supported the Caja del Rio Wildlife and Cultural Interpretive Management Area as critical to wildlife protection and connectivity but asked for increased protections against construction and development in this management area. Forestwide, each of the four alternatives in the DEIS provides for varying amounts of connectivity, primarily as a result of vegetation plan components that improved wildlife habitat.

Livestock Grazing: Some conservation groups and individuals want the elimination or reduction of livestock grazing and want additional standards and guidelines to ensure that management moves livestock grazing toward desired conditions. There is strong support for continued grazing from some traditional communities, permittees, and grazing associations. Supporting comments expressed concern that the Plan does not sustainably protect on-forest grazing and requests stronger protective language.

Vegetation Restoration: Partnering agencies and the majority of the public agree on the importance of restoring departed vegetation conditions in fire-adapted forest systems and that a mix of thinning and burning is the best method to accomplish that. However, a collection of comments expressed concern that the draft Plan's vegetative desired conditions and objectives for thinning and burning are not ecologically appropriate and would, in fact, be harmful. These comments include assertions that the science used to develop the vegetation plan components, including regionally developed desired conditions for vegetation, is outdated or inappropriate. They also question cutting any trees and the efficacy of prescribed burns. Additionally, many comments expressed that the way climate change was addressed in both the draft Plan and DEIS was inadequate. A couple comments claimed that the role of national forests should be to optimize carbon storage through maximizing the number of trees and asked for a new alternative with this focus.

Changes Made Between Draft and Final

Comments on the DEIS, along with new information and additional analyses, resulted in moderate updates to the EIS and Plan. For both the Plan and EIS, changes were largely based on three elements: editorial and technical changes (e.g., document consistency and corrections to grammar, punctuation, numbers, etc.), internal reviews, and public comments received during the 90-day public comment period (August 9 through November 7, 2019). A detailed accounting of changes is recorded in the project record; excluding minor editorial changes, clarifications, and typographical errors, modifications are summarized here:

Plan

- Defined the wildland-urban interface (WUI) in a more flexible manner to better adapt to on-the-ground conditions.
- Addressed ecological integrity in terrestrial and aquatic systems, as in the draft plan, with slight modifications based on public comment. For instance, language was added on headwater wetlands and direction on non-native species was clarified.
- Clarified the definitions of riparian vegetation and the riparian management zone (RMZ) and added reference to the current regional riparian strategy to direct management activities.
- Clarified that direction in the At-Risk Species section applies to plants as well as wildlife.
- Clarified the use of desired recreation opportunity spectrum (ROS) and scenery integrity objectives (SIO) to address confusion regarding the draft plan. Changes include adding desired conditions referencing the desired ROS and SIO maps in appendix A of the Plan and changing all mention of "ROS" to "desired ROS."
- Added a map of the ½ mile Continental Divide Scenic Trail corridor to appendix A.
- Recommended the same wilderness and eligible wild and scenic rivers as the draft plan, but corrected miles of designated wild and scenic rivers and corrected ROS setting standards for eligible wild and scenic rivers.
- Clarified standards regarding mechanized and motorized use within recommended wilderness management areas.
- Removed subjective language about values.
- Modified monitoring questions to better track ecosystem health within the capacity of the forest; added monitoring frequencies for each resource.
- Switched the focal species for piñon-juniper woodlands from gray vireo to juniper titmouse.
- Added definitions to the glossary for canopy cover, catastrophic fire, national trail, ROS, riparian management zones, soil and water conservation districts, traditional knowledge, and user conflict.
- Improved consistency between the Santa Fe NF Plan, the Carson NF Plan, and the Cibola NF Plan, particularly with respect to language regarding traditional and cultural uses.
- Added eight management approaches:
 - FW-RWE-MA-5: Consider working with partners to develop wetland action
 plans for headwater wetland restoration projects to address wetland stressors by
 identifying and prioritizing mitigation and restoration actions. -- Added based on
 public comment concerned that we did not include the Wetland Jewels
 Management Area in the forest plan and to maintain consistency with the Carson
 National Forest.

- FW-AQUASH-MA-6: Consider constructing beaver dam analogues to create similar beneficial conditions for aquatic and riparian habitats as would result from reintroducing beavers, while avoiding potential conflicts with adjacent land management. – Added based on public comment concerned with conflicts over introduced beavers.
- o FW-TERRASH-MA-8: Work with partners to develop and implement conservation strategies beneficial to terrestrial habitats (e.g., the State Wildlife Action Plan, etc.). Added based on public comment asking us to recognize the SWAP as a conservation strategy we should work with.
- FW-AIR-MA-3: Consider design features, best management practices, or mitigation measures to reduce fugitive dust where needed. – Added based on public comment.
- FW-AIR-MA-4: When possible, consider using non-potable water for dust abatement strategies. *Added based on public comment concerned about water conservation*.
- FW-RANGE-MA-13: Consider grazing aspen groves early in the season and resting in the fall, and doing a rest rotation every 2 consecutive years out of every 5 years. – Added based on public comment and internal review.
- o FW-MINERALS-MA-2: Collaborate with the New Mexico Department of Game and Fish on pre-closure inspections of underground mines to determine if cave-dependent species are present, and if so, to determine how to design and implement a closure that addresses the needs of resident or historically occurring wildlife within the constraints of meeting public safety concerns. Added based on public comments received.
- MA-OGLEASE-MA-1: Consider working with the New Mexico Department of Game and Fish to identify where and when timing limitations are implemented pertaining to deer and elk winter range and deer and elk fawning and calving habitat. – Added based on public comments received.
- Three plan components were removed two due to redundancy with another plan component and one to ensure compliance with law, regulation, and policy.
 - FW-FIRE-DC-5: Wildland fires in the WUI are predominantly low- to moderate-intensity fires *This plan component was redundant with FW-WUI-DC-2*
 - MA-RECWILD-S-2d: Development of existing mining claims (e.g., hard rock mining) within a recommended wilderness area shall be subject to valid existing rights. The legal term "valid existing rights" was determined to be misused in this context after internal review.
 - MA-RECWILD-G-2b: Mechanized uses for management activities (e.g., chainsaws or wheelbarrows) should be allowed in recommended wilderness areas if they do not permanently degrade wilderness characteristics of the area. – This plan component was removed as it was considered redundant with the modified MA-RECWILD-S-2f

■ *Modified MA-RECWILD-S-2f*:

Motor vehicles, motorized equipment (e.g., chainsaws or wheelbarrows), and mechanical transport shall not be allowed with the following exceptions:

i. unless specifically authorized for emergency use,

ii. for management activities that move the area toward desired conditions while protecting existing wilderness characteristics over the long term, or

iii. for the limited needs required for authorized management of a grazing allotment or acequia access, which will not result in long-term degradation to wilderness characteristics.

- Five plan components were added Two to comply with existing regional direction, one based on public comments, and two to respond to both public comment and emerging regional direction.
 - FW-VEG-DC-1f: Seral state proportions (per the 'Seral State Proportions for the Southwestern Region' supplement) are applied at the landscape scale, where contributions from all seral stages and low overall departure from reference proportions are positive indicators of ecosystem condition. Added regional desired conditions so vegetation section is strengthened to be more objective, consistent, and comprehensive.
 - o FW-VEG-DC-1g: At the scale of the plan unit, overall plant composition similarity to site potential (FSH 2090.11) averages greater than 66 percent but can vary considerably at the mid- and fine- scales owing to a diversity of seral conditions. Added regional desired conditions so vegetation section is strengthened to be more objective, consistent, and comprehensive.
 - FW-VEG-DC-3c: Habitats and refugia for rare, endemic, and culturally important species, are resilient to stressors and support species' persistence or recovery. Added based on comments received, and to improve consistency with the Carson National Forest.
 - o FW-REC-DC-7: Desired ROS settings serve as the desired conditions for recreation (see Appendix A, Fig. 9-west and Fig. 9-east). *Added to clarify the use of desired ROS in management*.
 - o FW-SCENIC-DC-6: Scenic integrity objectives serve as the desired conditions for scenery (see Appendix A, Fig. 8-west and Fig. 8-east). *Added to clarify the use of desired SIO in management*.
- Other plan components and management approaches were modified based on public comment and internal reviews, largely to improve clarity or correct a technical error.

EIS

- Modified vegetation elevation ranges to match the Terrestrial Ecological Unit Inventory (TEUI) and define patch-size estimates.
- Switched the focal species for piñon-juniper woodlands from gray vireo to juniper titmouse.
- Added definitions to the glossary for canopy cover, catastrophic fire, national trail, ROS, RMZ, Soil and Water Conservation Districts, traditional knowledge, and user conflict.
- Modified the analysis of ground disturbances with relation to at-risk species to acknowledge adverse impacts related to grazing.

Alternatives Considered

In addition to the selected alternative, I considered three other alternatives; these are discussed below. Alternative 2 was the environmentally preferred alternative. All reasonable alternatives to the preferred alternative must meet the purpose and need for change and address one or more significant issues. I identified those alternatives that met both the purpose and need for change and created a reasonable range of outputs, costs, management requirements, and effects from which to choose. A more detailed comparison of these alternatives can be found in chapter 2 of the FEIS.

Alternatives Analyzed in Detail

The range of alternatives developed and presented in the FEIS is based on a preliminary evaluation of the information gathered from public and internal comments and the purpose and need associated with the Plan. While all alternatives provide a wide range of ecosystem services and multiple uses, some give greater emphasis to selected resources based on the theme of the alternative and response to revision topics.

Elements Common to all alternatives

All alternatives considered in the FEIS adhere to the principles of multiple use and the sustained yield of goods and services required by the Multiple-Use and Sustained-Yield Act as described at 36 CFR 219.1 (b)). All the alternatives are designed to:

- Comply with applicable laws, regulations, and policies (see appendix D of the Plan for a list of the most prevalent);
- Contain plan decisions including desired conditions, objectives, standards, guidelines, timber suitability, and monitoring. Desired conditions are common across all alternatives and are described in detail in the Plan;
- Include mechanical treatments, including thinning and commercial harvests, while offering opportunities for fuelwood collection when projects allow.
- Conserve soil and water resources and prevent significant or permanent impairment of the productivity of the land;
- Provide protection for riparian areas;
- Maintain air quality that meets or exceeds applicable Federal, State, and local standards and regulations;

- Provide appropriate habitat to support species' viability and critical habitat for threatened and endangered species across the planning area;
- Use a common list of species of conservation concern. The species of conservation concern were selected based on regional guidance and recommendations from forest and State agency specialists;
- Recognize the value of traditional and cultural uses and their relationship to the Santa Fe NF:
- Protect cultural resources:
- Provide sustained multiple uses, products, and services in an environmentally acceptable manner (including timber, livestock forage, recreation opportunities, and leasable and locatable minerals);
- Incorporate amendments with plan direction that includes restrictions within the oil and gas leasing area as per the 2008 Oil and Gas Leasing EIS and 2012 supplement and restricts geothermal leasing as per the 2018 Geothermal EIS;
- Manage for special qualities of existing designated areas (wilderness; inventoried roadless areas; research natural areas; wild and scenic rivers; Jemez National Recreation Area; wild horse territories; national scenic, historic, and recreation trails; and scenic byways);
- Include the Cañada Bonita proposed research natural area; and
- Include 12 eligible wild and scenic rivers with plan components developed to maintain their outstandingly remarkable values.

In addition, progress toward desired conditions and objectives and the effectiveness of standards and guidelines are evaluated by a monitoring plan that provides continual feedback and evaluation.

Elements Common to All Action Alternatives

All action alternatives (alternatives 2, 3, and 4) are consistent with the National Forest Management Act, 2012 Planning Rule, and associated directives and emphasize adaptive management and the use of best available scientific information. Forestwide, geographic area, and management area direction identified in the revised forest plan would apply to all action alternatives, with some exceptions, specifically in regard to restoration objectives, allowable animal unit months (AUMs), and timber objectives. The primary difference among alternatives is in proposed management areas, annual acres of restoration, and primary type of restoration (e.g., use of prescribed fire or mechanical thinning). All three action alternatives:

- Emphasize vegetation treatments in frequent-fire forested systems (ponderosa pine and mixed conifer-frequent fire) that are highly departed from the vegetative desired conditions and historic fire regimes. They also emphasize restoration of highly departed non-forested vegetation types (juniper grass, piñon juniper grass, Colorado Plateau Great Basin grassland, sagebrush shrubland, and montane subalpine grassland) with treatments such as mechanical treatments, prescribed or naturally ignited wildfires, seeding, or other techniques;
- Include restoration treatments in riparian areas and emphasize those benefitting water resources, including treatments such as stream channel and habitat restoration, watershed restoration, and invasive species removal;

- Provide direction on invasive species management in multiple ERUs and for the benefit of at-risk species and other natives species;
- Increase direction on soil and soil crust protection, maintenance, and restoration, e.g., after vegetation treatment projects or human activity;
- Increase guidance on fostering relationships and developing opportunities to leverage partnerships and collaboration and enhance communication;
- Recognize and support traditional communities (e.g., federally recognized tribes and rural historic communities) and uses;
- Emphasize sustainable recreation and increase guidance on implementing a sustainable recreation program;
- Use the scenic integrity objective system to manage for varying levels of scenery across the forest;
- Include limited numbers and acres of management areas that are included to provide specific focus;
- Provide management direction for recommended wilderness;
- Incorporate seven geographic areas that further focus forestwide goals and direction based upon the unique character and needs of the diverse forest and surrounding communities.

Additionally, there are many plan components in alternatives 2, 3, and 4 where the majority of the language is similar across two or all three alternatives.

Alternative 1: No Action (1987 Forest Plan)

Under the no-action alternative, the 1987 Forest Plan, as amended, would continue to guide management of the Santa Fe NF. Alternative 1 emphasizes timber management over restoration and includes specific direction on fire suppression. Riparian areas and activities on the road system are also emphasized. Direction for managing uses like recreation and traditional and cultural uses is included, but minimal. The forest would also remain divided into the current 20 management areas that cover the entire forest. This alternative does not explicitly address ecological, social, and economic sustainability or climate change.

Alternative 2

Alternative 2 is the preferred alternative outlined in the forest plan, which focuses on healthy ecological function that supports multiple uses. The interdisciplinary team developed this alternative iteratively with the public to address the needs for change and issues identified in chapter 1. It is designed to address needs for restored forested and non-forested vegetation, incorporating natural wildfires, wildlife terrestrial and aquatic habitat, improved riparian management zones, watershed health, improved rangeland forage and infrastructure, sustainable recreation, and desires for recommended wilderness and other special areas. This alternative maintains current levels of use while improving infrastructure and increasing the level of restoring ecological health.

The Santa Fe NF will continue to manage the three designated wild and scenic river (WSR) segments according to their individual comprehensive river management plans in the final Plan:

- Rio Chama: wild 21.6 miles; scenic 3.0 miles; 4.0 miles of study river
- Pecos River: wild 13.5 miles; recreational 7.0 miles

• East Fork of the Jemez: wild 4.0 miles; recreational 2.0 miles; scenic 5.0 miles

Alternative 2 directs management of other designated areas consistent with their establishing legislation or decision. In addition to six designated wildernesses and three designated wild and scenic rivers, the Santa Fe NF manages the Jemez National Recreation Area, inventoried roadless areas, national trails (including the Continental Divide National Scenic Trail), national scenic byways, wild horse territories, and research natural areas. The final plan generally does not repeat law, regulation, or policy, but provides guidance consistent with those requirements and clarifies their intent as necessary.

In addition to recommended wilderness (see table 1) and eligible wild and scenic rivers (see table 2), alternative 2 includes four management areas that apply plan components to specific parcels of land to reflect a management emphasis (table 3).

Table 3. Alternative 2 management areas

Management Areas	Acres (unless otherwise noted)
Oil and Gas Leasing Area	208,831
Poshuouinge Cultural Interpretive Area	2,768
Nogales Cliff House Cultural Interpretive Area	2,166
Rattlesnake Ridge Cultural Interpretive Area	1,369
Tsipinuouinge Cultural Management Area	609
Caja del Rio Cultural Interpretive/ Biological Management Area	35,247
Cañada Bonita Proposed Research Natural Area	300
Recommended Wilderness Management Areas (5 areas)	23,845
Eligible Wild and Scenic Rivers (12 segments)	74.23 miles

The Oil and Gas Leasing Management Area provides stipulations to protect resources from actions associated with oil and gas leasing in the portion of the forest where there is the potential for these activities. These stipulations are used to provide agency recommendations to the BLM for issuing new leases on NFS lands. The stipulations and direction are carried forward from the 1987 Plan, which was amended based on the 2008 and 2012 oil and gas leasing environmental impact statements.

The Caja del Rio Wildlife and Cultural Interpretive Management Area (or "Caja") has important value for its areas of cultural significance, wildlife habitat along the Rio Grande that provides for wildlife connectivity, and relatively remote recreation opportunities. Plan direction aims to preserve these characteristics by creating interpretive materials and limiting future development. We received numerous comments from the public supporting this management area and identifying the Caja as an area of recreational and cultural importance on the forest.

The four archaeological sites—Nogales Cliff House, Poshuouinge, Rattlesnake Ridge, and Tsipinuouinge—that make up the Cultural Interpretive Management Area have long attracted the interest of archaeologists and recreationists. Under the final Plan, these sites have objectives for interpretive tool development and stabilization that will improve their ability to provide cultural ecosystem services (e.g., recreation, education, and spiritual connection to the past) for local communities and support the tourism industry as it relates to the forest.

Based on an evaluation of potential research natural areas, the final Plan recommends a candidate for designation by the Regional Forester and Research Station Director, the Cañada Bonita Recommended RNA. The Cañada Bonita Recommended RNA management area offers an example of an outstanding high-elevation Thurber fescue (*Festuca thurberi*) grassland community at or very near its climax expression. This area was also proposed in the 1987 Forest Plan and it remains a high-quality example of a high-elevation Thurber fescue grassland community, acting as an ecological reference.

Alternative 2 remains the preferred alternative after public and internal comments from the 90-day draft plan comment period were received and analyzed. The comments were used to inform the final version of the forest plan, but the Plan is fundamentally the same as alternative 2 (the draft plan) with minor modifications as noted above in the "Changes from draft Plan and DEIS to final Plan and FEIS" section. This decision incorporates additional changes in response to objections that are not reflected in this alternative as it appeared when published prior to the initiation of the objection period in September 2021.

Alternative 3

Alternative 3 emphasizes natural processes. This includes a heavier reliance on fire to move vegetation toward desired conditions, incorporating natural wildfires (i.e., lightning starts), and improve wildlife terrestrial habitat, aquatic habitat, riparian management zones, and watershed health. This alternative also includes reductions in amenities or infrastructure (e.g., range infrastructure, trail signage, roads) for human uses, such as recreation and livestock grazing, although it does not actually limit those uses. Additionally, alternative 3 has the most acres of recommended wilderness (at 270,130 acres total) and adds several unique management areas, including the Wetland Jewels Management Area (75,615 acres), the Calaveras Management Area (10,397 acres), and the Holy Ghost Canyon Management Area (2,442 acres).

Alternative 4

Alternative 4 emphasizes the multiple uses that occur across the forest. This includes heavier reliance on mechanical treatments to move vegetation toward desired conditions and increased amenities or infrastructure (e.g., roads, range infrastructure, trail signage, and developed campsites) for human uses. Alternative 4 reduces the amount of recommended wilderness on the forest to zero acres and recommends to Congress that 68 acres are removed from San Pedro Parks Wilderness (around the San Gregorio Reservoir). Additionally, this alternative includes unique management areas: two motorized recreation management areas (30,274 acres) and three urban recreation management areas (24,208 acres).

Alternatives Considered but Eliminated from Detailed Study

The NEPA requires Federal agencies to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). Public comments received in response to the initial plan components and alternative themes in January and March 2017 provided suggestions for alternative methods for achieving the purpose and need. Some of these alternatives are outside the scope of revising the forest plan; already decided by higher law, regulation, or policy; duplicative of the alternatives considered in detail; or determined to have components that would cause unnecessary environmental harm. Therefore, a number of alternatives were considered but dismissed from detailed consideration for reasons summarized in chapter 2 of the final EIS.

Environmentally Preferable Alternative

The environmentally preferable alternative is that which causes the least harm to the biological and physical environment and best protects and preserves historic, cultural, and natural resources. Alternative 2 is the environmentally preferred alternative. When compared to the other alternatives, it best contributes to ecological, social, and economic sustainability. Alternative 2 helps advance desired conditions for the Santa Fe NF by establishing vegetation management to promote ecosystem resiliency and reduce the risk of catastrophic fires on the landscape, by promoting habitat connectivity and restoration across the forest, by continuing to provide and promote socioeconomic development, by maintaining cultural and historic uses of the national forest, and by providing for future outdoor recreational activities and uses by diverse populations.

Best Available Scientific Information

The 2012 Planning Rule (§219.6(a)(3) and 219.14(a)(4)) requires the responsible official to document how the best available scientific information (BASI) was used to inform the assessment, the plan decision, and the monitoring program. Such documentation must identify what information was determined to be the best available scientific information, explain the basis for that determination, and explain how the information was applied to the issues considered.

In the context of BASI, "available" means that the information is currently available in a form useful for the planning process without further data collection, modification, or validation. Analysis or interpretation of the BASI may be needed to place it in the appropriate context for planning; the limited time allotted to complete the Assessment means that BASI must be readily available.

Developing the final Plan was an interactive process using BASI, regional guidance, internal feedback, and collaboration with a wide variety of government agencies, federally recognized tribes, non-governmental organizations, and the public. Public and stakeholder feedback regarding the accuracy, reliability, and relevance of scientific information helped to ensure the use and documentation of BASI. A review of literature submitted by the public during the 90-day comment period and cited in comments as BASI is included in the project record.

BASI is cited throughout the planning documents along with lists of references found at the end of each volume and the origin of data analyzed in the assessment. References included in the assessment, final Plan, and final EIS reflect the most relevant documents, given the scope and scale of the assessment, and determined to be BASI.

The planning process began with the preparation of the Santa Fe National Forest Plan Final Assessment, Reports Volume I and Volume II (USDA Forest Service 2016a and 2016b). In developing this assessment, Forest Service experts provide information supported by the BASI relevant to the Santa Fe NF plan area and management to inform the evaluation of conditions, trends and risks to sustainability for the topics of the assessment addressed in volumes one and two. This includes conditions and trends or the sustainability of social, economic, or ecological systems found on the forest.

The foundation from which the Assessment, and subsequently the Plan, was developed was the expertise of the planning team members and extended members, who have a combined level of experience of well over 100 years working on the forest. The interdisciplinary team of resource professionals compiled and evaluated relevant information for the Assessment, the BASI, and analyses contained therein.

The Santa Fe NF provided opportunities for the public to develop a shared understanding of the BASI and how it would be used during the Assessment (FSH 1909.12 Chapter 0, Section 7.11a). Before initiating the Assessment, the Santa Fe NF held workshops for forest users, agency and government staff, and Santa Fe NF employees to engage in dialogue about shared expectations and the ability to work together through Plan Revision. This initiated the discussion on many topics, including expectations regarding using the BASI, especially in conjunction with local knowledge. Throughout the assessment, the Santa Fe NF provided opportunities for the public—including State and Federal agencies, local government, tribes, non-profit organizations, and others—to provide input on or suggest sources of the BASI. Main venues for such information sharing included public meetings and public comment period that occurred between the spring and summer of 2014, meetings with local groups or county planning departments, or personal communication with both Forest Service and non-Forest Service experts.

The Assessment and the Needs-for-Change document ("Findings from the Final Assessment: Twelve Focus Areas and Needs for Change Statements (USDA Forest Service 2016c)) served as the basis for preparing the draft forest plan and draft EIS, updated as needed by the interdisciplinary team.

The desired conditions for ecosystems were adapted from regionally consistent guidelines developed in 2008 by a multidisciplinary team at the regional level. The team sought to develop mechanisms to incorporate existing plan management direction for the Mexican spotted owl, northern goshawk, and old-growth forests into the plan revision process. They concluded that the best way to achieve that goal was to develop desired conditions for the relevant set of forest and woodland ecosystems. Ultimately, the desired conditions went further: they established a vision for restoration of species composition, forest structure, and ecological function to address long-term sustainability of forested ecosystems, including habitats for native and desired species. The desired conditions were based on existing science in wildlife ecology, forest ecology, and restoration principles.

A second multidisciplinary group was convened in 2014 to revisit and update guidance related to desired conditions in light of advances in best available scientific information. Specifically, Reynolds et al. (2013) supplied improved direction relating to historic disturbance regimes, structure, and function in ponderosa pine and dry mixed-conifer forests of the Southwest. A summary of the science used in the development of these regionwide desired conditions can be found in the 2018 guidance document, "Desired Conditions for Use in Forest Plan Revision in the Southwestern Region, Development and Science Basis," which is located in the project record.

On the Santa Fe NF, vegetation specialists used broad-scale state and transition models for several of the forest's ecological response units (ERUs), which have been developed based on a comprehensive literature review. Published scientific information was used to define vegetation model states, identify parameter values for these models, and run quantitative scenario analysis using Vegetation Dynamics Development Tool (VDDT) software (ESSA Technologies Ltd. 2006) to determine relative proportions of model states on the landscape. Models were originally developed by LANDFIRE, The Nature Conservancy, and the Integrated Landscape Assessment Project and have been further refined using regional mapping and ecosystem data by the Forest Service Southwestern Region, with input from forest specialists. Most state and transition destinations and probabilities are derived from Forest Vegetation Simulator modeling (Dixon 2002; see appendix B in the FEIS for full details of the vegetation models used).

An important aspect of social sustainability is protecting human communities from wildfires; and fire ecology, management, and risk assessment—separate from and related to vegetation management—were a major theme during the Santa Fe NF's planning process. Recently, many

peer-reviewed scientific publications on fire ecology have determined that the return of fire to dry forests restores ecological processes and maintains biodiversity. The FEIS provides multiple references to relevant, locally-based work and an abundance of empirical data (e.g., papers authored by Baisan, Hurteau, Keyser, Margolis, Swetnam), which show a long history of low-severity regimes in ponderosa pine and dry mixed conifer forests present in northern New Mexico. Reference fire regime condition classes (FRCC) and burn severity information was compiled during the assessment phase from data given in the LANDFIRE (2010) database. Other inputs came directly from forest records. Additional literature suggested by the public has been added to the EIS between draft and final, such as Hurteau (2017) and McCauley et al. (2019).

The watershed condition framework, an analysis methodology the Forest Service developed, classifies the state of all NFS watersheds and provides guidance to help national forests evaluate, prioritize, and measure the progress of restoration within watersheds (USDA Forest Service 2011a and 2011b; Potyondy and Geier 2011). This framework was used in the analysis of watersheds on the Santa Fe NF, along with datasets from the Forest Service corporate (Spatial Database Engine) ArcGIS feature classes.

The water resources and watershed condition indicators are based on two well-established Forest Service programs: the Watershed Condition Framework (USDA Forest Service 2011) and National Best Management Practices for Water Quality Management on National Forest System Lands (USDA Forest Service 2012). Both programs involve a rigorous evaluation of conditions related to ecological condition and management actions to produce a qualitative rating. While these ratings are qualitative, they have been consistently implemented across large spatial and temporal scales, thus providing a basis from which to track changes.

The Santa Fe NF identified 36 at-risk species within its boundaries. Four federally recognized species (three endangered and one threatened) are found on the Santa Fe NF and rely on the forest for most or all of their natural life-cycle requirements. These include the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), Mexican spotted owl (*Strix occidentalis lucida*), Jemez Mountain salamander (*Plethodon neomexicanus*) and the Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritu*). These species are managed according to recovery plans developed by the U.S. Fish and Wildlife Service (USFWS) that outline the critical habitat (CH) and ecological conditions necessary to facilitate their protection and recovery. There are four other federally listed species found in northern New Mexico (USFWS, IPaC System): the southwestern willow flycatcher (*Empidonax traillii extimus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), Canada lynx (*Lynx canadensis*), and Rio Grande silvery minnow (*Hybognathus amarus*); however, these species are not routinely observed in the Santa Fe NF and no resident populations are known to exist on the forest. The Forest Service relied on published bird surveys conducted by the Bureau of Reclamation (USDA 2018),⁵ as well as state reports from Colorado (https://cpw.state.co.us/lynxresearch) and New Mexico to make these determinations.

NatureServe is the authority for species of conservation concern status assessments and resulting global status ranks. The national database of these ranks is available through their NatureServe Explorer website (www.natureserve.org/explorer); species data on the NatureServe Explorer website are refreshed every 4 months. A total of 32 species of conservation concern were identified for the Santa Fe NF during the assessment process. They include: 1 amphibian; 8 birds; 3 fish; 3 invertebrates; 6 mammals; and 11 plants. These species of conservation concern were determined to be at risk due to small or endemic populations, limited habitat, current degraded

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⁵ USDA 2018. Middle Rio Grande Southwestern Willow Flycatcher Study Results 2017. U.S. Department of the Interior, Bureau of Reclamation, Technical Service Center, Fisheries and Wildlife Resources, Denver, Colorado.

habitat or specific ecological conditions, and/ or current Forest Service management activities or other threats that may result in negative impacts to the species. Information used to formulate these determinations were drawn from various sources, including the New Mexico State Wildlife Action Plan, Biota Information System of New Mexico (BISON-M), and countless scientific papers published in peer-reviewed journals by personnel from universities and state and federal agencies.

In addition to species-specific research, the forest relied heavily on best available scientific information relating to vegetation management, because this plays a critical role in developing and maintaining habitat for at-risk species.

Focal species selected for monitoring were chosen by a panel of wildlife biologists who used their understanding of wildlife survey techniques as well as the appropriateness of each species to represent a given ecosystem. Personnel consulted included staff from the Forest Service, U.S. Fish and Wildlife Service, New Mexico Department of Game and Fish, and other conservation organizations.

Desired conditions and objectives for recreational settings, recreation opportunities and sustainable recreation were informed by using characteristics in the Forest Service ROS Users Guide (USDA Forest Service 1986), as well as sustainable recreation principles. Information from national visitor use monitoring and national strategies such as "A Framework for Sustainable Recreation" were used to develop forest plan direction. Conditions related to recreation will be monitored and a changed condition report will be prepared every two years.

Much of the information about climate change on the Santa Fe NF was provided by a climate change vulnerability assessment project, an ecosystem-based evaluation of the potential vulnerability of Southwest ecosystems to the projected climate of the late 21st century. The resulting report (see project record) provides summaries of each major upland ERU on the forest and their vulnerability based on projected climate departure from the historic climate of a given ERU location. During the assessment phase, carbon stocks on the forest were also analyzed by specialists on the forest and at the regional level. The analysis included biomass, carbon emissions, and soil organic carbon, and was based on vegetation characterization and state-and-transition modeling. Carbon emissions were characterized using a case study by Vegh et al. (2013). Desired conditions and objectives were informed by potential stressors and threats influenced by climate variability and change, particularly disturbance drivers such as catastrophic fire and drought.

Much of the information with respect to social and economic conditions and trends included in the assessment and final EIS was derived from the Economic Profile System-Human Dimension Toolkit (Headwaters Economics), developed in partnership with the Bureau of Land Management and the Forest Service. This database uses published statistics from Federal data sources, including but not limited to the U.S. Bureau of Economic Analysis, the U.S. Bureau of Labor Statistics, and the U.S. Census Bureau. Other significant sources of information used in this area of analysis were work by the University of New Mexico's Bureau of Business and Economic Research; publications on livestock ranching on the Santa Fe and Carson NFs; data on Forest Service programs, salary and non-salary expenditures, and employment from Forest Service corporate databases; and the results of an analysis of the contribution of forest programs and expenditures to jobs and labor income using Forest Service corporate data and data from IMPLAN (an economic impact model) for the year 2016. Public comments and expert input contributed to the development of plan components related to social and economic conditions.

For all these reasons, based on my review of the final EIS and the planning record, I have determined that the most accurate and reliable scientific information available and relevant to the issues considered in this forest plan revision has been used to inform the planning process and has been applied to the issues considered in the revision, as required by 36 CFR 219.3.

Findings Required by Other Laws

The Forest Service manages the Santa Fe National Forest in conformance with many laws and regulations. I have considered the statutes specific to individual resources as described in the final EIS and I find that this decision meets our obligations to the current statutory duties of the Forest Service. Following are summaries of how the revised Plan addresses the relevant laws and regulations.

American Indian Religious Freedom Act

Federal agencies must make a good faith effort to understand how Indian religious practices may come into conflict with other forest uses and consider in their decision-making any adverse impacts on these practices. The Santa Fe NF is within the ancestral domain of a multitude of tribal and pueblo nations, including the Pueblos of Santa Clara, Tesuque, Nambe, Ohkay Owingeh, Pojoaque, Santo Domingo, Santa Ana, San Felipe, San Ildefonso, Cochiti, Zia, and Jemez; the Navajo Nation; and the Jicarilla Apache Nation.

No effects on American Indian social, economic, or subsistence rights are anticipated as a result of the land management plan revision. Regardless of which alternative is chosen, the Forest Service is required to consult with tribes when management activities may impact treaty rights and/or cultural sites and cultural use. Desired conditions for areas of tribal importance for all action alternatives of the Plan are:

- 1. Healthy, sustainable, and harvestable populations of culturally significant flora and fauna are available to ensure the rights reserved by Native Americans.
- 2. Tribal members' access to the Santa Fe NF for the exercise of treaty rights is recognized and accommodated. Opportunities exist to practice traditional, cultural, and religious activities, such as plant gathering and ceremonial activities, which are essential to sustaining their way of life, cultural integrity, social cohesion, and economic well-being.

Therefore, I find the Plan to be compliant with this act.

Archaeological Resources Protection Act

This act provides protection to archaeological resources found on public lands and Indian lands of the United States. The legislation provides civil and criminal penalties for those who remove or damage archaeological resources in violation of the prohibitions contained in the act. The act prohibits the removal of archaeological resources on public lands or Indian lands without first obtaining a permit from the affected Federal land manager or Tribe and requires Federal agencies to develop plans to survey lands under their management to determine the nature and extent of archaeological and cultural resources.

The Plan is strategic and programmatic in nature, providing guidance and direction to future site-specific projects and activities. Compliance with Section 106 of the National Historic Preservation Act and 36 CFR 800 regulations requires assessments to document the presence of historic properties within the area of potential effect for any site-specific activities and to meet the intent of this act. The forest will also continue to consult with tribes during site-specific

management activities that may impact cultural sites and cultural use. The components in the Plan include provisions that take into consideration American Indian rights and interests and cultural resources. Therefore, I find the Plan to be compliant with this act.

Clean Air Act

In accordance with 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 boundaries of National Forest System lands and to work with states to protect air resources from degradation associated with the impacts of air pollution emitted outside of National Forest System lands. The FEIS Chapter 3, Air Quality, addresses and discloses potential impacts from program activities that are approved by the forest plan, including the use of prescribed fire. The analysis indicates that all alternatives work toward the desired conditions for air quality over the long term to varying degrees, depending on the alternative selected.

Chapter 2 of the Plan includes desired conditions and strategies for maintaining air quality and monitoring questions for gathering information. It contains components that protect air quality by reducing risk of large emissions from catastrophic wildfires. The Air section also contains guidance on minimizing smoke impacts, with examples such as public notification, timing of ignitions, mass ignitions, and limiting fire spread. The Plan directs that air quality meets or surpasses New Mexico and Federal ambient air quality standards and that visibility in Class I and sensitive Class II areas is free of human-caused impacts. Conformity determinations and more detailed air quality impact analyses will be made at subsequent levels of planning and analysis where emissions can be more accurately quantified, reasonably forecasted, and local impacts can be assessed. Therefore, I find the Plan to be in compliance with the Clean Air Act.

Clean Water Act

The Clean Water Act (33 U.S.C. § 1251 et seq.) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

Implementing this land management plan is expected to maintain and improve water quality and satisfy all State water quality requirements. This finding is based on direction contained in the land management plan, application of "best management practices" specifically designed to protect water quality, and the discussions of water quality and beneficial uses addressed in Chapter 3, Watersheds and Water Resources, of the FEIS. Management direction protecting water quality can be found in many locations throughout the Plan, including the Water Resources section, the Riparian and Wetland Ecosystems section, the Roads section, and the Recreation section and subsections. Project-level analysis required for land management plan implementation will be required to demonstrate compliance with the Clean Water Act. I find that the Plan is compliant with this act.

Endangered Species Act

The purpose of the Endangered Species Act is to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved and to provide 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, the Endangered Species Act requires Federal agencies to ensure that any agency action does not jeopardize the continued existence of the species (section 7(a)(2)). The act also requires the U.S. Fish and Wildlife Service and Forest Service, respectively, to base the biological opinion and

subsequent agency action on the use of best scientific and commercially available data. In accordance with section 7(c) of the act, U.S. Fish and Wildlife Service identified the federally listed threatened and endangered species, species proposed for Federal listing, and candidate species to be considered for further evaluation throughout the land management plan revision process. A consultation agreement between the USFWS and USFS was signed on November 21, 2018. On July 16, 2019, the USFWS Information for Planning and Consultation website was used to formally request and receive an official list of proposed, threatened, endangered, and candidate species for the Santa Fe NF administrative forest boundary area that would be addressed in the biological assessment.

In accordance with Section 7(c) of the Endangered Species Act, the biological assessment was prepared to assess the effects of implementing the Santa Fe NF's Plan on four federally recognized species (three endangered and one threatened) that are found on the forest and rely on the forest for most or all of their natural life-cycle requirements. These include the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), Mexican spotted owl (*Strix occidentalis lucida*), Jemez Mountain salamander (*Plethodon neomexicanus*) and the Holy Ghost ipomopsis (*Ipomopsis sancti-spiritu*). At present, there are no known Federal candidate or Federal proposed species on the forest. Three endangered species, the southwestern willow flycatcher, least tern and Rio Grande silvery minnow are outside the forest boundary, but within watersheds shared by the forest and surrounding lands; none of these species occur in the plan area. A threatened species, the western yellow-billed cuckoo could potentially use limited riparian habitat on the Santa Fe NF, but is only known as a migrant and has not been documented on the forest. Canada lynx, threatened in New Mexico, has not been documented to den or breed on the Santa Fe NF.

In accordance with section 7(c) of the Endangered Species Act, the U.S. Fish and Wildlife Service identified the listed threatened and endangered species that may be present on the Santa Fe National Forest. The Forest Service prepared a biological assessment to assess the effects of implementing the land management plan on federally listed threatened and endangered species and designated critical habitat known to occur on the Santa Fe. Following section 7 consultation, the U.S. Fish and Wildlife Service issued a biological opinion on August 23, 2021.

The Forest Service determined that the proposed action (forest plan) "may affect, is likely to adversely affect" the New Mexico meadow jumping mouse and its designated critical habitat, Jemez Mountain salamander and its designated critical habitat, Mexican spotted owl and its designated critical habitat, and Holy Ghost ipomopsis. There is no designated critical habitat for the Holy Ghost ipomopsis; therefore, none will be affected. Additionally, the August 2020 biological assessment included determinations of "no effect" for a variety of species and associated critical habitat (see table 4).

There was a finding of "no jeopardy" made for all species and critical habitats, and no "take" was assigned because of the programmatic nature of the land management plan.

Conservation recommendations were provided for each species by the U.S. Fish and Wildlife Service in the biological opinion; recommendations include continuation of surveys of the three adversely affected species and conducting actions that protect or improve their habitats. These are included in the biological opinion.

The Plan includes desired conditions, standards, guidelines, and objectives and provides broad management direction that meets our responsibilities under the Endangered Species Act Section 7(a)(1). These plan components comply with the requirements of the Endangered Species Act and

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⁶ 16 U.S.C. 1536(a)(2)

the associated recovery plan for each federally listed species. For these reasons, I find this Plan to be in compliance with the requirements of the Endangered Species Act of 1973.

Table 4. Federally listed threatened and endangered species and designated critical habitats addressed in the biological assessment. Species indicated with an asterisk (*) were carried forward for analysis.

Scientific Name	Common Name	Federal Status	Species determination	Critical Habitat (CH)	Critical Habitat determination		
Mammals	Mammals						
Lynx canadensis	Canada lynx	Threatened	Not present on the forest. No Effect. (See description below.)	No CH in analysis area.	No Effect		
Zapus hudsonius luteus*	New Mexico meadow jumping mouse	Endangered	May affect, likely to adversely affect.	CH in analysis area.	May affect, likely to adversely affect.		
Birds	Birds						
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	Threatened w of Rio Grande, Distinct Population Segment (DPS)	Not present on the forest. No Effect. (See description below.)	No CH in analysis area.	No Effect		
Empidonax traillii extimus	Southwestern willow flycatcher	Endangered	Not present on the forest. No Effect. (See description below.)	No CH in analysis area.	No Effect		
Strix occidentalis lucida*	Mexican spotted owl	Threatened	May affect, likely to adversely affect	CH in analysis area.	May affect, likely to adversely affect.		
Sterna antillarum	Least tern	Endangered	Not present on the forest. No Effect. (See description below.)	No CH in analysis area.	No Effect		
Fish							
Hybognathus amarus	Rio Grande silvery minnow	Endangered	Not present on the forest. No Effect. (See description below.)	No CH in analysis area.	No Effect		
Amphibian							
Plethodon neomexicanus*	Jemez Mountains salamander	Endangered	May affect, likely to adversely affect	CH in analysis area.	May affect, likely to adversely affect.		
Plant							
Ipomopsis sanctispiritus*	Holy Ghost ipomopsis	Endangered	May affect, likely to adversely affect.	No designated CH in analysis area.	May affect, likely to adversely affect.		

Environmental Justice

Executive Order 12898 directs Federal agencies to focus attention on human health and the environmental conditions of minority and low-income communities. The purpose of Executive Order 12898 is to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations. As described in table 5, the primary environmental justice communities present in areas surrounding the Santa Fe NF are Hispanic/Latino, Native American communities, persons with disabilities, and low-income communities of all races and ethnicities.

All alternatives considered in the FEIS would contribute to social and economic sustainability by providing benefits to environmental justice communities, improving the quality of life, and providing opportunities for income and jobs. The forest would continue to provide for traditional, cultural, and spiritual values that are of particular interest to Native American tribes. No populations in the plan area would experience significant adverse human health impacts or environmental effects due to management actions proposed under any of the alternatives considered. Therefore, I find that the Plan is in compliance with this Executive order.

Table 5. Breakdown of potential environmental justice communities in the plan area and why they might qualify as such

Census Designation	Why they might qualify as an environmental justice community	Counties likely to have populations that might qualify as environmental justice communities
Hispanic/Latino	Minority demographic group with high populations and high instances of poverty compared to the analysis area as a whole and New Mexico.	Rio Arriba Co., Mora Co., Santa Fe Co., San Miguel Co.
Native American*	Minority demographic group with high populations and high instances of poverty compared to the analysis area as a whole and New Mexico.	Rio Arriba Co., Sandoval Co., Pueblo and Tribal lands
Persons with Disabilities (all races and ethnicities)	Minority population with high populations compared to New Mexico as a whole.	Mora Co., San Miguel Co.
Low Income Communities (all races and ethnicities)**	Communities where the percent of individuals or families living below the poverty line is greater than that of the analysis area and New Mexico as a whole.	Rio Arriba Co., Mora Co., San Miguel Co.

^{*} There are high levels of uncertainty surrounding Native American census data and there may well be considerably higher populations of Native Americans in and around the analysis area who have cultural and historic ties to the lands managed by the Santa Fe NF.

Federal Land Policy and Management Act

The Federal Land Policy and Management Act allows for the granting of easements across National Forest System lands. The Plan is strategic and programmatic in nature. It provides guidance and direction for future site-specific projects and activities; the land management plan does not create, authorize, or execute any site-specific activity, although it does provide for the consideration of granting easements and rights-of-way. Therefore, I find that the Plan is consistent with this act.

^{**} Impoverished households, those experiencing housing insecurity, and people of lower educational attainment are typically more difficult to count via methods such as the census or to keep track of for purposes of policy-making.

Invasive Species

Executive Order 13751 (amends Executive Order 13112) directs Federal agencies to prevent the introduction of invasive species, to detect and respond rapidly to and control populations of such species in a cost-effective and environmentally-sound manner, to monitor invasive species populations accurately and reliably, to provide for restoration of native species and habitat conditions in ecosystems that have been invaded, to conduct research on invasive species and develop technologies to prevent introduction, and to promote public education on invasive species and the means to address them. All of these actions are subject to the availability of appropriations. Forest Service Manual 2900, Invasive Species Management, sets forth Forest Service policy, responsibilities, and direction for the prevention, detection, control, and restoration of effects from aquatic and terrestrial invasive species (including vertebrates, invertebrates, plants, and pathogens).

The Plan is strategic and programmatic in nature, providing guidance and direction to future site-specific projects and activities. The Plan does not create, authorize, or execute any ground-disturbing activity, although it does provide for the consideration of certain types of activities that may have the potential to affect the dispersal of invasive species. The land management plan includes forestwide desired conditions, objectives, and guidelines that stress the need to treat new invaders and use best management practices that limit the introduction and spread of invasive species due to management activities. In addition, other direction serves to protect watershed, soil, riparian, and aquatic conditions in ways that will reduce management-caused disturbances that otherwise might increase weed spread or introduction. The monitoring program includes indicators associated with invasive plant species and the effectiveness of treatments. Therefore, the Plan is fully compliant with Executive Order 13751.

Migratory Bird Treaty Act

Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, was issued in furtherance of the purposes of the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Acts, the Fish and Wildlife Coordination Act, the Endangered Species Act, and the NEPA. This order requires inclusion of the effects of Federal actions on migratory birds as a part of the environmental analysis process. On December 8, 2008, the Forest Service signed a memorandum of understanding with the U.S. Fish and Wildlife Service to complement the Executive order (USDI-USFWS, 2008); the Forest Service agreed to incorporate migratory bird habitat and population objectives and recommendations into the agency planning process—in cooperation with other governments, State and Federal agencies, and non-Federal partners—and to strive to protect, restore, enhance, and manage the habitat of migratory birds and prevent the further loss or degradation of remaining habitats on National Forest System lands. The Council for the Conservation of Migratory Birds was established in 2009 by the Secretary of the Interior to oversee Executive Order 13186. More than 20 Federal agencies, including the Forest Service, currently participate in and have representation on the Council for the Conservation of Migratory Birds.

The Plan includes forestwide direction related to key stressors for migratory birds and their habitats, including direction to maintain or improve forest resilience, composition, and structure. Future site-specific activities or projects with the potential to impact migratory bird habitat will be analyzed with site-specific analysis under the NEPA process and will comply with Plan direction. Therefore, I find the Plan to be compliant with the Migratory Bird Treaty Act and Executive Order 13186.

Multiple-Use Sustained-Yield Act

The Forest Service manages National Forest System lands to sustain the multiple use of its renewable resources in perpetuity while maintaining the long-term health and productivity of the land. Resources are managed through a combination of approaches and concepts for the benefit of human communities and natural resources. As demonstrated in the FEIS and as required by the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528-531), the Plan guides sustainable and integrated management of forest resources in the context of the broader landscape, giving due consideration to the relative values of the various resources in particular areas. Therefore, I find that the Plan is compliant with the Multiple-Use Sustained-Yield Act.

National Environmental Policy Act

The NEPA requires that Federal agencies prepare detailed statements on proposed actions that may significantly affect the quality of the human environment. The act's requirement is designed to serve two major functions:

- to provide decision makers with a detailed accounting of the likely environmental effects of proposed actions prior to adoption and
- to inform the public of, and allow comment on, such efforts.

The Forest Service has developed, gathered, and reviewed an extensive amount of information regarding the potential effects of each of the alternatives considered in the FEIS. This information expands and refines the data, analyses, and public input described in the NEPA documents associated with the draft plan and DEIS. My decision also considers the large amount of public input, including public meetings, comments on the Internet website, and comments received during the 120-day comment period for the DEIS.

All substantive comments, written and oral, made regarding the DEIS have been summarized and responded to in appendix O of the FEIS (volume 4). During this effort, public involvement has led to changes in the analysis and the alternatives (see above, "Changes from draft Plan and DEIS to final Plan and FEIS"). I find that the environmental analysis and public involvement process upon which the FEIS is based complies with each of the major elements of the requirements set forth by the Council on Environmental Quality regulations for implementing the NEPA (40 CFR 1500-1508). My conclusion is supported by the following findings:

- The FEIS considered a broad range of reasonable alternatives that were developed and revised based on robust public involvement, including public input and comment. The four alternatives considered in detail in the FEIS cover a broad range of possible management allocations based on revision topics identified through public involvement and scoping.
- The FEIS reflects consideration of cumulative effects of the alternatives by evaluating past, present, and reasonably foreseeable future actions in the plan area, including Federal, State, tribal, and private lands. The environmental effects analysis estimates the potential effects of timber activities and timber-associated activities. The analysis of effects to wildlife was based on the assumption that these activities would take place with management constraints in place to ensure habitat availability at certain thresholds. Moreover, although non-Federal lands are outside the scope of this decision, effects from their management have been thoroughly considered and coordinated, to the extent practicable, in the FEIS.
- The Plan includes a monitoring program and an adaptive management approach to ensure needed adjustments are made over time.

• The final EIS uses scientific integrity to support the conclusions made. The decision here does not authorize timber sales or any other specific activity on the Santa Fe NF. Sitespecific decisions will be made on projects in compliance with the NEPA, Endangered Species Act, and other environmental laws following applicable public involvement and appeal procedures.

Based on the above, the Plan is fully compliant with the National Environmental Policy Act and Council on Environmental Quality implementing regulations.

National Forest Management Act

The National Forest Management Act requires the development, maintenance, amendment, and revision of land management plans for each unit of the National Forest System. These land management plans help to create a dynamic management system, so that an interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences will be applied to all future actions on the unit. Under the National Forest Management Act, the Forest Service is to ensure coordination of the multiple uses and sustained yield of products and services of the National Forest System.

The act requires the Secretary of Agriculture to promulgate regulations for developing and maintaining land management plans. On April 9, 2012, the Department of Agriculture issued a Final Planning Rule for National Forest System land management planning (36 CFR Part 219; refer to the Federal Register at 77 FR 68, pp. 21162-21276).

As discussed in detail in the requirements of the planning rule section of this document, my review of the planning process, the FEIS, and the information provided in the record of decision indicates that the final Plan and its preparation meet requirements for revising plans under the provisions of the 2012 Planning Rule and are compliant with the National Forest Management Act.

National Historic Preservation Act

Section 106 of the National Historic Preservation Act requires each Federal agency to take into account the effects of its actions on historic properties, prior to approving expenditure of Federal funds on an undertaking or prior to issuing any license; Section 110 of the act outlines the Federal agency responsibility to establish and maintain a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places and protection of historic properties.

The Plan is a programmatic-level planning effort that will not directly authorize any ground-disturbing activities or projects. The Plan includes desired conditions, goals, objectives, standards, guidelines, management strategies, and monitoring requirements for managing and protecting cultural resources listed or eligible for the National Register of Historic Places.

Site-specific projects that are undertaken as a result of the direction in the Plan will comply with laws and regulations that ensure protection of heritage resources. Significant cultural resources will be identified, protected, and monitored in compliance with the act. Any consultation taking place for proposed activities will be coordinated with the New Mexico State Historic Preservation Office. Therefore, I find that the Plan is in compliance with this act.

National Trails System Act

The National Trails System Act of 1968, as amended, calls for establishing trails for people of all ages, interests, skills, and physical abilities. The act establishes four classes of trails: national scenic trails, national historic trails, national recreation trails, and side and connecting trails. The forest has one designated national scenic trail (the Continental Divide National Scenic Trail), three national historic trails (the Old Spanish National Historic Trail, El Camino Real de Tierra Adentro National Historic Trail, and the Santa Fe National Historic Trail), and two national recreation trails (Cañones National Recreation Trail and Winsor National Recreation Trail). The National Trails System Act guides management of these assets.

As required by the National Trails System Act, the 2009 Continental Divide National Scenic Trail Comprehensive Plan provides management direction within the corridor of the Continental Divide National Scenic Trail. The intent of the 2009 Comprehensive Plan is to provide a uniform program for the Trail that reflects the purposes of the National Scenic Trail System and allows for the use and protection of the natural and cultural resources within the Trail corridor.

The Plan provides plan components that protect the nature and purpose of the Continental Divide National Scenic Trail while enhancing user experience and access, consistent with the Act and 2009 Comprehensive Plan. Therefore, I find that the Plan complies with the National Trails System Act.

Roadless Area Conservation Rule

Management direction for inventoried roadless areas is compliant with the 2001 Roadless Area Conservation Rule (36 CFR 294 Subpart B, published at 66 FR 3244-3273). The 2001 Roadless Conservation Rule includes a prohibition on road construction and road reconstruction in inventoried roadless areas and prohibitions on timber cutting, sale, or removal, except in certain circumstances. The Plan is a programmatic-level planning effort and does not directly authorize any road construction, reconstruction, or timber removal. Therefore, I find that the Plan is compliant with the Roadless Area Conservation Rule.

Travel Management Rule

The final rule for Travel Management; Designated Routes and Areas for Motor Vehicle Use (commonly referred to as the 2005 Travel Management Rule) implements provisions of Executive Orders 11644 and 11989 to address the use of off-road motor vehicles on Federal lands. Regulations implementing this rule are found at 36 CFR Part 212. The portion of the rule pertaining to motor vehicle use is subpart B; the portion of the rule pertaining to motorized oversnow vehicle use is subpart C, which was updated in January 2015. The Executive Order 11644 "minimization criteria" specify:

In designating National Forest System trails and areas on National Forest System lands, the responsible official shall consider effects on the following with the objective of minimizing:

- 1. Damage to soil, watershed, vegetation, and other forest resources;
- 2. Harassment of wildlife and significant disruption of wildlife habitats;
- 3. Conflicts between motor vehicle use and existing or proposed recreation uses of National Forest System lands or neighboring Federal lands;
- 4. Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands; and
- 5. Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.(36 CFR 212.55(b), Specific criteria for designation of trails and areas).

Prior to this plan revision, the forest designated specific roads, areas, and trails for the use of motor vehicles (which includes off-road vehicles) that are displayed on the motorized vehicle use maps required by 36 CFR 212 subpart B. This programmatic plan decision does not authorize additional motor vehicle use or prohibit existing motor vehicles uses, therefore those maps remain unchanged. Therefore, I find that this Plan is in compliance with the Travel Management Rule.

Wetlands and Floodplains

Executive Order 11988 of May 24, 1977 (as amended by Executive Order 12148 of July 20, 1979), Floodplain Management, and Executive Order 11990 of May 24, 1977 (as amended by Executive Order 12608 of September 9, 1987), Protection of Wetlands, provide protections for floodplains and wetlands. These Executive orders require Federal agencies to avoid, to the extent possible, short- and long-term effects resulting from the modification or destruction of wetlands and the occupancy and modification of floodplains. Forestwide standards and guidelines are provided for soil, water, wetlands, and riparian areas to minimize effects to wetlands and floodplains. They incorporate the best management practices of the Forest Service Soil and Water Conservation Handbook. Therefore, I find that the Plan is compliant with these Executive orders.

Wild and Scenic Rivers Act

This act establishes a National Wild and Scenic Rivers System with three classifications of rivers: wild, scenic, and recreational. The purpose of the act is to protect the designated rivers "for the benefit and enjoyment of present and future generations" and to preserve the rivers' free-flowing condition, water quality, and outstandingly remarkable values.

Analysis of the designated wild and scenic rivers is included in the FEIS. In addition, the Wild and Scenic Rivers Act requires an evaluation of eligible wild, scenic, or recreational rivers in land management planning. This was completed and the 12 river segments (74.23 miles) identified through the eligible wild and scenic river study process were analyzed in the FEIS. Management direction in the Plan provides protection of free-flowing conditions and the outstandingly remarkable values identified for the eligible segments of rivers on the forest. Therefore, I find that the Plan is compliant with the Wild and Scenic Rivers Act.

Wilderness Act

The Wilderness Act of 1964 established a National Wilderness Preservation System to be administered in such a manner as to leave these areas unimpaired for future use and enjoyment as wilderness. It provides the statutory definition of wilderness, how areas are assessed for addition to the wilderness preservation system, and management requirements for congressionally designated areas.

Evaluation of existing wilderness and areas recommended for inclusion in the National Wilderness Preservation System was included in the environmental analysis for the land management plan. The Plan provides direction for designated wilderness through desired conditions, standards, and guidelines that preserves the wilderness character of designated wilderness. Therefore, I find that this Plan is compliant with this act.

Implementation Date

This revised forest plan becomes effective 30 calendar days after publication of the notice of its approval in the *Federal Register* (36 CFR 219.17(a), 2012 Planning Rule). This approval will not occur until the pre-decisional review process is complete and a final record of decision is issued.

The revised Plan provides a framework and text to guide resource management options. It is a strategic, programmatic document and does not make project-level decisions or irreversible or irretrievable commitments of resources. Those kinds of commitments would be made after more detailed, site-specific proposals are initiated and further public comment opportunities occur as part of the site-specific environmental analysis process.

Administrative Review and Objections

This decision to approve the revised land management plan for the Santa Fe National Forest was subject to the objection process identified in 36 CFR Part 219 Subpart B (219.50 to 219.62). A 60-day objection period on the draft record of decision, land management plan, and final EIS ran concurrently with an objection period for the Regional Forester's species of conservation concern. The objection period was initiated on September 2, 2021, with the publication of the notice of the opportunity to object in the newspaper of record (the *Albuquerque Journal*).

The Forest Service received 15 eligible objections. Interested parties and objectors attended a series of virtual meetings over three days, March 15 to March 17, 2022, to discuss objection issues. On May 24, 2022, the Regional Forester for the Southwestern Region issued a written response to the objection issues. These written responses outline the rationale for each response and contained instructions to the responsible official as appropriate. The written response is the final decision by the U.S. Department of Agriculture regarding the objections.

The Regional Forester found that the final environmental impact statement, land management plan, draft record of decision, and associated planning record sufficiently addressed most issues raised through objection. She also found the land management plan revision documents are in compliance with current law, regulation, and policy. For those issues that required additional clarification or modifications, the reviewing officer issued instructions to the Santa Fe National Forest. These instructions remedied any concerns over potential violations of law, regulation, or policy raised during the objection period and are detailed here.

Modifications Made in Response to Objections and Instructions

As instructed by the Regional Forester, modifications to the final environmental impact statement, land management plan, and planning record have been completed as indicated below. Some instructions required additional clarification or review of new information. Other instructions required minor modifications to plan components. All modifications are responsive to issues identified in previous comment periods and during objections. Analysis for modified plan components was covered by prior analysis of the land management plan where similar plan aspects were assessed. Changes to the land management plan were made in the document itself, as it will be the guiding management framework for the Santa Fe National Forest. Below, I provide details on changes made in response to the reviewing officer's instructions. Changes are grouped by category, then for each individual objection issue I present the instruction from the revieing officer, where the change was made (final Plan, FEIS, ROD, or project record), and details on how the instruction was addressed.

Traditional Communities: Land Grant Communities and Acequia Associations

Instruction from Reviewing Officer: Modify plan language to better reflect the desire for the plan to contribute to maintaining the culture of northern New Mexico historic communities and strengthen the explanation in the ROD how the land management plan recognizes and is responsive to input received in the objection process.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: FW-RURALH-DC-1 was modified in the final Plan. The revised desired condition is: "The uniqueness and values of rural historic communities are recognized and valued; the traditional uses important for maintaining these cultures are supported and contribute to the social and economic sustainability of local communities." Clarifying language was also added to the ROD under the Rationale for Decision section.

Instruction from Reviewing Officer: Clarify in the ROD how the plan recognizes land grants and acequias.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): ROD

How Recommendation or Instruction was addressed: Language was added to the ROD under the section, "Rationale for the Decision, Supporting Traditional Communities and Uses" as follows:

"In the Rural Historic Communities section, land grant communities and acequia associations are recognized as political subdivisions of the State of New Mexico with specific plan components that value their unique history and uses of NFS lands and management approaches that describe a collaborative, respectful, and mutually beneficial relationship with the Forest Service. Traditional uses of NFS lands are described in the Northern New Mexico Traditional Communities and Uses section but direction for their management is found throughout the Final Plan, including in the Vegetation, Watersheds and Water Resources, Roads, Recreation, Special Uses, and Partnerships sections, among others.

The importance of allowing opportunities for traditional communities to be engaged with the Santa Fe, so that sustained use of the national forest for cultural and subsistence needs are supported, is an underlying theme."

Sustainable Rangelands and Livestock Grazing

Instruction from Reviewing Officer: Update the discussion on ecosystem services located on page 121 of the final plan. Livestock production (which results in a food source) is a type of **provisioning service** that can be obtained from rangelands. So perhaps a suggested rewrite of the paragraph would be to ensure that it is clarified that rangelands and other areas available for livestock grazing would be what provides the "natural capital" to support provisioning services such as livestock grazing/production. The following General Technical Report may be helpful as it is aimed at better describing how the Forest Service can include ecosystem services in planning efforts as well as some lessons learned: *Integrating Ecosystem Services Into National Forest Service Policy and Operations* https://www.fs.fed.us/pnw/pubs/pnw gtr943.pdf.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: The narrative for the Sustainable Rangelands and Livestock Grazing section of the final Plan was updated to clarify the relationship between livestock grazing and ecosystem services. The new text on ecosystem services reads:

"Sustainable rangelands play an essential role in providing ecosystem services. Rangelands, as working landscapes, sustain beef cattle ranching while providing habitat for wildlife, recreation, and open space amenities, as well as spiritual and cultural values that define a way of life (Maher et al. 2021). Continuing this way of life on ancestral lands enhances the culture and heritage for future generations, making cultural ecosystem services one of the most prominent services provided by rangelands on the Santa Fe National Forest. Many people living in traditional communities participate in or have connections to ranching and identify with the associated values. Forage provided by rangelands supports livestock grazing and provides provisioning ecosystem services which contribute to the livelihood of permit holders and to the economy of traditional communities and counties. These livestock grazing opportunities contribute to the economic viability of local ranches which helps to conserve open space by keeping the private lands in agricultural production and avoiding exurban development (Bradford et al. 2002, Brown and McDonald 1995, Resnik et al. 2006, USDA Forest Service 2007).

Proper livestock grazing can serve as a management tool (not just a use) and can provide ecological benefits. By viewing herbivory (grazing) as a tool to achieve a desired, clearly enunciated result, managed grazing can be used to achieve multiple purposes (Budd and Thorpe 2009). Well managed livestock grazing can aid in maintaining and/or improving rangeland health through such things as invasive plant control, reduction of fine fuels, and improved heterogeneity of vegetation across the landscape (Derner et al. 2009, Adler et al. 2001, Strand et al. 2014). Maintaining and/or improving the health and resiliency of rangelands facilitates their ability to provide supporting ecosystem services such as nutrient cycling and regulating ecosystem services such long-term storage of carbon (Havstad et al. 2007, Teague and Kreuter, 2020, Yahdjian et al. 2015)."

The citations in this new text were added to the references section of the final Plan.

Instruction from Reviewing Officer: Suggest removing text from ROD on AUM numbers and clarifying in record the reason for the change.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): ROD

How Recommendation or Instruction was addressed: Exact numbers of AUMs were removed from the ROD. No numbers of AUMs were created or used for our analysis or decision. In our analyses, we only look at estimates of general increase of decrease of AUMs that the forest can be expected to support over time, based on estimated increases or decreases in forage that comes from the different management strategies in each analyzed alternative.

Instruction from Reviewing Officer: Objector unclear about "maintenance of open space offforest" referenced in the grazing narrative in the forest plan (p. 121). This may refer to the public/private lands connection, and how public lands grazing can contribute to the economic viability of private ranchlands and thus prevent their conversion to other land uses. We suggest clarifying what is meant.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: The ecosystem services section of the Sustainable Rangelands and Livestock Grazing narrative in the final Plan was updated to include citations on how cattle grazing helps maintain open space (i.e., landscape heterogeneity):

"Proper livestock grazing can serve as a management tool (not just a use) and can provide ecological benefits. By viewing herbivory (grazing) as a tool to achieve a desired, clearly enunciated result, managed grazing can be used to achieve multiple purposes (Budd and Thorpe 2009). Well managed livestock grazing can aid in maintaining and/or improving rangeland health through such things as invasive plant control, reduction of fine fuels, and improved heterogeneity of vegetation across the landscape (Derner et al. 2009, Adler et al. 2001, Strand et al. 2014). Maintaining and/or improving the health and resiliency of rangelands facilitates their ability to provide supporting ecosystem services such as nutrient cycling and regulating ecosystem services such long-term storage of carbon (Havstad et al. 2007, Teague and Kreuter 2020, Yahdjian et al. 2015)."

Instruction from Reviewing Officer: Objector could not find references cited in response to comments. Add the following references to the planning record: Malan et al. 2018, McInnis 2009, Perry 2005, Lucas et al. 2004, Parsons et al. 2003, and Saunders et al. 2012

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): FEIS Volume 4

How Recommendation or Instruction was addressed: These references were added to the reference section of the FEIS, Volume 4 (Appendix O. Response to Comments).

Wildlife and At-Risk Species

Instruction from Reviewing Officer: Add to the FEIS disclosing how the existing plan components, together with this desired condition meet the intent to provide the multiple uses associated with rare, endemic, and culturally important species OR indicate why this is unnecessary. Based on the record, it is unclear whether the plan components are sufficient, if additional plan components are necessary, or if plan components must be revised as indicated by the objectors.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): FEIS Volume 1

How Recommendation or Instruction was addressed: The FEIS (volume 1) was revised, with specific focus on federally listed and species of conservation concern species, to better reflect desired conditions and potential effects associated with all alternatives (tables 51 and 52). The biological assessment and Section 7 consultation completed in 2021 provides discussion relating to threatened and endangered species including additional scientific literature (BASI) and ties to appropriate forest plan components. Additional forest plan components, as they relate to specific at-risk species, are provided in volume 2 (crosswalk appendix E).

Instruction from Reviewing Officer:

Both the 2012 Rule and the Endangered Species Act require that explicit determinations are
made regarding at-risk species (i.e., Endangered Species Act listed species and species of
conservation concern). Include a determination section for each species that makes explicit the
tie between plan components, the projected changes in the environment, the stressors plan

components make or manage, and the outcome for the species (219.9 as described in FSH 1909.12, 23.13). Give the highlights of why the plan meets the requirements of the 2012 Rule and Endangered Species Act requirements for conservation of at-risk species.

• State determinations using the specific language in the Rule regarding the requirements for the different at-risk species. Specifically, 219.9 requires that: 'The responsible official shall determine whether or not the plan components required by paragraph (a) of this section provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area.'

Thus, in making a determination call for Endangered Species Act species, the EIS should specifically state whether the plan does or does not 'provide the ecological conditions necessary to contribute to the recovery of the species,' while for species of conservation concern the EIS should specifically state whether the plan does or does not 'provide the ecological conditions necessary to maintain a viable population within the plan area.' Failure to do so leaves ambiguity as to whether the plan meets the requirements of 219.9.

• Provide citations that demonstrate the use of best available science within the EIS, particularly as it pertains to the determination. Include scientific literature that supports plan components that ensure the plan area provides the necessary ecological conditions to meet the requirements of 219.9 for the species considered.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): Final Plan, FEIS, Volume 1

How Recommendation or Instruction was addressed: The final Plan was revised to include the language from the 2012 Planning Rule (36 CFR 219.9 and FSH 1909.12 section 23.13) specific to species of conservation concern to include 'maintain viable population' and language from the Endangered Species Act for federally listed species to include 'contribute to recovery.'

The FEIS Volume 1 was revised to more accurately reflect appropriate effects determination language and associated effects analysis (i.e., clearly defined primary threats and habitat requirements), as defined for threatened and endangered species in the Endangered Species Consultation Handbook (1998) (Table 51) and for species of conservation concern (36 CFR 219.9 and as described in FSH 1909. 12, 23.13). Additional scientific literature (BASI) are provided and effects analysis for all at-risk species was revised accordingly.

Instruction from Reviewing Officer: Demonstrate consistency among forests concerning Guidelines that regulate the inclusion of Endangered Species Act recovery plans (Carson – FW-WFP-G-1, Cibola – FW-GDL-ARS-1, FW-ATRISK-G-2) and conservation agreements (Carson – FW-WFP-G-2, Cibola – FW-GDL-ARS-2, FW-ATRISK-G-3) into each forest plan.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: FW-ATRISK-G-2 and FW-ATRISK-G-3 were examined in conjunction with the Carson National Forest and the Cibola National Forest. These plan components were made consistent, except where each forest had specific reasons for their use of unique language. The Santa Fe National Forest chose to use the phrase, "project activities" in FW-ATRISK-G-2 so as to make clear that

the guideline applied to only project work (i.e., work that involves NEPA analysis). The Santa Fe National Forest also chose to modify the phrase, "designated critical habitat," to match the other two forests. The guideline now applies to, "federally listed species' habitat."

Instruction from Reviewing Officer: Include notes from the Mexican Spotted Owl Leadership Forum Workshop and the joint stipulation agreement in the planning record. Conservation recommendations were provided for each species by the U.S. Fish and Wildlife Service in the biological opinion; recommendations include continuation of surveys of the three adversely affected species and conducting actions that protect or improve their habitats. These are included in the biological opinion.

The Plan includes desired conditions, standards, guidelines, and objectives and provides broad management direction that meets our responsibilities under the Endangered Species Act Section 7(a)(1). These plan components comply with the requirements of the Endangered Species Act and the associated recovery plan for each federally listed species. For these reasons, I find this Plan to be in compliance with the requirements of the Endangered Species Act of 1973.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): Project Record

How Recommendation or Instruction was addressed: These documents were added to the project record.

Instruction from Reviewing Officer: In order to meet requirements of the Rule, the responsible official shall add an evaluation to the Plan and/or FEIS to effectively disclose how the responsible official determined whether the Plan components fulfill 36 CFR 219.9 as it relates to recovery of New Mexico meadow jumping mouse [see FSH 1909.12, 23.13 for details]. The disclosure shall build on the Assessment (threats, limiting factors, etc.), and FEIS Vol. 1 Ch. 3, table 51, p. 225, to describe how plan components form a conservation fabric to effectively provide necessary ecological conditions to recover the mouse in the plan area. The evaluation would be strengthened if it links the important roles of riparian and adjacent upland areas, ensuring the entirety of DCH (330ft [100m]) from stream bankfull, is considered.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): FEIS Volume 1

How Recommendation or Instruction was addressed: The FEIS (volume 1) was revised with specific focus on federally listed species, including New Mexico meadow jumping mouse, to better reflect desired conditions and potential effects associated with the preferred alternative based on primary threats and limiting factors for the species (table 51). Revised analysis relating to New Mexico meadow jumping mouse provides clearer reference to Section 7 consultation completed for each proposed forest plan (preferred alternative) in 2021, which tiers to management objectives and species protection measures as outlined in the most recent (draft) USFWS NMMJM Recovery Plan (Ref biological assessment). Additional scientific literature (BASI) from the biological assessment were included as well as a crosswalk to appropriate forest plan components (table 51).

Instruction from Reviewing Officer: Revise the FEIS to clearly state the differing roles Management Approaches and Plan Components play in the Plan. Clarify that Management Approaches are not binding and do not represent elements of the system to meet 219.9 for at-risk species.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): FEIS, Volume 2 (appendices)

How Recommendation or Instruction was addressed: In appendix E, we clarified that management approaches are not plan components and defined what they are and how they are used. We also clarified in Sections A through C that the crosswalk tables included both plan components and management approaches.

Instruction from Reviewing Officer: Define "refugia" in the glossary.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: The following definition was added to the glossary in the final Plan:

"Refugia: Habitats that convey spatial and temporal resistance and/or resilience to biotic communities affected by disturbances or as places or times where the negative effects of disturbance are lower than those in the surrounding area (or time; Sedell et al. 1990)."

The associated reference was added to the reference section:

Sedell, J.R., G.H. Reeves, F.R. Hauer, and J.A. Stanford. 1990. Role of refugia in recovery from disturbances: Modern fragmented and disconnected river systems. Environmental Management, 14(5), 711-724. DOI 10.1007/BF02394720.

Recreation and Scenery

Instruction from Reviewing Officer: Clarify the agency's understanding of the amendment and administrative change processes in the Final ROD. If of interest to the forest, the amendment and administrative change processes could be explained in the general sense, rather than specific to ROS and SIO.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): ROD

How Recommendation or Instruction was addressed: Language was removed from the ROD to ensure that there was no confusion regarding when administrative changes versus amendments would be used. The difference, with regard to the desired ROS and SIO maps, is explained in the final Plan in the Recreation and Scenery sections as follows:

Recreation: "As with all desired conditions, projects implemented under the forest plan are designed to maintain or move toward desired conditions (see Contents of a Forest Plan in Chapter 1). Due to the forestwide scale of mapping for ROS, some inconsistencies may be present. Examples of this are existing features with long-term impacts that will not achieve the desired ROS in the life of the forest plan (e.g., roads or trails, power lines, recreation facilities, pipelines, utility corridors, etc.), or geospatial data inconsistencies, especially along ROS boundaries. Updates to improve map accuracy by resolving these inconsistencies would be administrative changes to the map."

Scenery: "As with all desired conditions, projects implemented under the forest plan are designed to maintain or move toward desired conditions (see Contents of a Forest Plan in chapter 1). Due to the forestwide scale of mapping for SIOs, some inconsistencies may be present. Examples of this are existing features with long-term impacts that will not achieve the desired SIO in the life of the forest plan (e.g., roads or trails, power lines, recreation facilities, pipelines, utility corridors, etc.), or geospatial data inconsistencies, especially along SIO boundaries. Updates to improve map accuracy by resolving these inconsistencies would be administrative changes to the map."

Instruction from Reviewing Officer: Add recreation residences to the list of recreation specialuse authorizations in FW-RECSU-DC-01. The rewritten desired condition could read as: "Recreation special-use authorizations (e.g., outfitters and guides, competitive races, family reunions, special events, Ski Santa Fe, and recreation residences) provide unique opportunities, services, and experiences for the recreating public and address a demonstrated demand for a specific recreation opportunity."

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: The suggested language was added to FW-RECSU-DC-1. The plan component now reads, "Recreation special-use authorizations (e.g., outfitters and guides, competitive races, family reunions, special events, Ski Santa Fe, and recreation residences) provide unique opportunities, services, and experiences for the recreating public and address a demonstrated demand for a specific recreation opportunity."

Instruction from Reviewing Officer: File the transportation analysis report in the planning record.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): Project Record

How Recommendation or Instruction was addressed: The Transportation Analysis Process Report from the forest's travel management process was filed in the Project Record.

Instruction from Reviewing Officer: Revise Forest Service Manual 2300 titles in Plan Appendix E. Relevant Laws, Regulations, and Policy to match the updated titles. Add 2310 Sustainable Recreation Planning, for example.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: Appendix E in the final Plan was updated to have the most recent FSM 2300 titles.

Continental Divide National Scenic Trail

Instruction from Reviewing Officer: In the Record of Decision include the following or something similar under the "Findings Required by Other Laws" section:

"National Trails Act: As directed by the National Trails System Act (Public Law 90-543), the 2009 Continental Divide National Scenic Trail Comprehensive Plan sets forth direction to guide the development and Record of Decision Record of Decision – Carson National Forest Land Management Plan management along the trail and within the corridor of the Continental Divide National Scenic Trail (CDNST). The intent of the 2009 Comprehensive Plan is to provide a uniform CDNST program that reflects the purposes of the National Scenic Trail System and allows for the use and protection of the natural and cultural resources found along the rights-of-way and located route on lands of all jurisdictions.

The land management plan provides for the nature and purposes of the Continental Divide National Scenic Trail (CDNST), in accordance with the programmatic requirements of the National Trails System Act, as amended, and the 2009 CDNST Comprehensive Plan. Therefore, I find that the land management plan complies with this Act, and no updates to the 2009 CDNST Comprehensive Plan would be needed upon approval of the land management plan."

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): ROD

How Recommendation or Instruction was addressed: The suggested language was added to the ROD under the "Findings Required by Other Laws" section.

Instruction from Reviewing Officer: Describe consistency with the National Trail System Act and the relationship of the Act with the CDNST Comprehensive Plan of 2009 and the influence the comprehensive plan had on the Designated Area and Plan Components in the Record of Decision.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): ROD

How Recommendation or Instruction was addressed: This instruction was addressed by adding suggested language to the ROD under the "Findings Required by Other Laws" section. See above.

Instruction from Reviewing Officer: Add the CDNST Designated Area to the ROS and SIO maps.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: The ROS and SIO maps in appendix A of the final Plan were updated to show the CDNST.

Instruction from Reviewing Officer: In FEIS Volume 4 Appendix O. Response to Comments Response DA071 (p. 327): The response states "In the final Plan, DA-NTRL-DC-8 reflects the desire that the Continental Divide National Scenic Trail passes mainly through primitive or semi-primitive non-motorized settings. This is the case on the Santa Fe NF to the extent possible." There is no DA-NTRL-DC-8, this is not the way the Santa Fe organizes components (i.e., DA-CDNST not DA-NTRL is used) so this appears to be an error of reference. DA-CDNST-G-2 speaks to the ROS class for the CDNST and probably should be the referenced component in this response to comments. The response to this comment should be altered to reflect the correct component and correct language.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): FEIS Volume 4

How Recommendation or Instruction was addressed: Volume 4 of the FEIS (Appendix O. Response to Comments) was modified to reference the correct plan components. DA071 now references DA-CDNST-DC-1 and DA-CDNST-G-2.

Instruction from Reviewing Officer: Add the full reference to the 2009 CDT Comprehensive Plan to the Plan References section: "USDA FS (U.S. Department of Agriculture- Forest Service). (2009). The 2009 Continental Divide National Scenic Trail Comprehensive Plan. Washington, DC: USDA Forest Service Retrieved from http://www.fs.fed.us/cdt/main/cdnst_comprehensive_plan_final_092809.pdf." This is the way the reference appears in the Santa Fe NF EIS. Remove the footnotes that only have this link to avoid confusion if/when the URL changes and/or the CDT plan is revised.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: This reference was added to the reference section of the final Plan.

Fire and Fuels and Air Resources

Instruction from Reviewing Officer: While the paper by Dr. McCampbell is in the forest's record (20191107Comx1HittS1x.pdf, pp. 1625-1649), it is not included in their consideration of science spreadsheet. The paper is not peer-reviewed, nor has it been published. It would be helpful to add this paper and a review of it to the BASI review spreadsheet. Objector also raises the issue that the peer-reviewed studies cited in this paper should be considered BASI. I found the forest met their obligation in disclosing health impacts resulting from smoke (degraded air quality) and therefore don't find that necessary.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): Project Record

How Recommendation or Instruction was addressed: The paper was reviewed by fire and air quality specialists on the forest. Based on these reviews, it was not considered necessary to add it to the FEIS analysis or final Plan as best available scientific information. The paper and review were added to the project record.

Instruction from Reviewing Officer: Change wording from, "Healthy ecosystems are resilient to uncharacteristic fire disturbance (fires that burn large areas with excessive severity, like the Cerro Grande (2000) and Los Conchas (2011) fires). Fire, both planned and unplanned, is a tool for restoring fire-adapted ecosystems that burn under natural fire regimes, where fires typically burn over smaller areas and with mixed (not extreme) severity," to "Healthy Ecosystems are resilient to uncharacteristic fire disturbance (fires that burn large areas with excessive severity). Fire, both planned and unplanned, is a tool for restoring fire-adapted ecosystems that burn under natural fire regimes, where fires typically burn over smaller areas and with mixed (not extreme) severity."

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan

How Recommendation or Instruction was addressed: The problematic phrase was changed to that suggested by the Reviewing Officer to reduce confusion.

Recommended Wilderness Areas

Instruction from Reviewing Officer: Correct the planning record to acknowledge the existing mining claims in P85B. This would require corrections to the original evaluation form for P85B, as well as the description of the area as analyzed in alternatives 2 and 3 of the FEIS.

- Once information on mining claims has been included in the record, reevaluate P85B wilderness characteristic worksheet to determine if the Santa Fe NF would still rate it as "High" with this new information.
- The responsible official needs to re-evaluate P85B and document how the information about objector's mining claims was considered with respect to the Thompson Peak RWA before issuing a final Record of Decision.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): final Plan; FEIS Volumes 1, 2 and 3; ROD

How Recommendation or Instruction was addressed: A team of forest specialists worked through the evaluation and analysis process (see FEIS Volume 3, Appendix J)

again for the Thompson Peak Recommended Wilderness Management Area, taking into account the new information about mining claims that was received from Comexico. This was documented in the project record, and the ROD, FEIS, and final Plan were updated to reflect the new evaluation, analysis, and recommendation.

Mineral Resources

Instruction from Reviewing Officer: Add to the planning record the 2018 Final List of Critical Minerals and take into consideration that the Macho Canyon massive sulfide deposit contained two critical minerals—tungsten and bismuth. Also consider that an expanded exploration Plan of Operations is a future potential development in the RWA boundary. The current small exploration Plan of Operations drilling program is adjacent to the RWA boundary and if their project produces positive results, an expanded drilling program Plan of Operations for more geologic information will be the next logical step in the mining process.

Where Changes Were Made (final Plan, FEIS, ROD, Project Record): Project Record

How Recommendation or Instruction was addressed: The 2018 Final List of Critical Minerals was added to the project record.

Additional Changes

The reviewing officer's examination of the Santa Fe's documents and project record identified additional minor corrections or clarifications unrelated to a specific objection that do not change the analysis or direction in the plan. These changes clarify intent or correct errors.

- The proper functioning condition technical references were updated to reflect the most recent documents. These citations were added to the reference sections of the final Plan and FEIS:
 - U.S. Department of the Interior (USDI). 2015. Riparian area management: Proper functioning condition assessment for lotic areas. Technical Reference 1737-15.
 Bureau of Land Management, National Operations Center, Denver, Colorado.
 - U.S. Department of the Interior (USDI). 2020. Riparian area management: Proper functioning condition assessment for lentic areas. 3rd ed. Technical Reference 1737-16. Bureau of Land Management, National Operations Center, Denver, Colorado.
- The phrase "conservation groups" was replaced with "conservation groups and individuals" in the ROD on page 26.
- The references to the FSH for range were updated throughout volume 4 of the FEIS (Appendix O. Response to Comments).
- "Hoof action" was removed from the Sustainable Rangelands and Livestock Grazing section's ecosystem services narrative in the final Plan. The ecosystem services narrative for this section was also updated (see instruction response above).
- In the assumptions section of the Rangeland analysis of the FEIS, volume 1, the phrase, "unauthorized use of rangeland will be minimal to non-existent" was replaced with the

phrase, "unauthorized use of rangeland will be addressed consistent with existing law, regulation, and policy (36 CFR 261, FSH 2209.13)."

- Numbers in the Wild and Scenic Rivers section of the final Plan were corrected.
- Labels for the maps in appendix A of the final Plan were corrected.
- Use of the term "foreground" was clarified in the final Plan, and the definition of the Scenery Management System was expanded on in the final Plan Glossary to include the definition of "foreground."

Plan Implementation

As required by the National Forest Management Act and the planning rule, subject to valid existing rights, all projects and activities authorized by the Forest Service after approval of this plan must be consistent with the applicable plan components (16 U.S.C. 1604(i)) as described at 36 CFR 219.15. Previously approved and ongoing projects and activities are not required to meet the direction of the Plan and will remain consistent with the direction in the 1987 Forest Plan, as amended (USDA FS Santa Fe NF 1987).

All project or activity approval documents, made after the effective date of the Plan, will describe how the project or activity is consistent with the applicable components as described in the Consistency of Projects with the Plan section of the final Plan (chapter 1). When a proposed project or activity would not be consistent with the applicable plan components, the responsible official shall take one of the following steps, subject to valid existing rights:

- Modify the proposed project or activity to make it consistent with the applicable plan components;
- Reject the proposal or terminate the project or activity;
- Amend the Plan so that the project or activity will be consistent with the Plan, as amended; or
- 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.

Resource plans (for example, travel management plans) developed by the forest that apply to the resources or land areas within the planning area must be consistent with the plan components. Resource plans developed prior to this Plan decision will be evaluated for consistency with the Plan and updated if necessary.

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

Project Consistency

As required by the National Forest Management Act, all projects and activities authorized by the Forest Service, after record of the decision for the final Plan, must be consistent with the Plan (16 U.S.C. 1604(i) as described at 36 CFR 219.15). This is accomplished by a project or activity being consistent with applicable plan components. If a proposed project or activity is not consistent with the applicable plan components, the responsible official has the following options (subject to valid existing rights):

- Modify the proposed project or activity to make it consistent with the applicable plan components;
- Reject the proposal or terminate the project or activity;
- Amend the plan so that the project or activity will be consistent with the plan as amended;
 or
- 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 (36 CFR 219.15(c)).

Any substantive changes to plan components require a plan amendment, with appropriate analysis as required under the NEPA. Administrative changes can be made without documentation of environmental effects, such as updates to data and maps, management approaches, and relevant background information; fixing typographical errors; or updating other required or optional content of a plan (content other than plan components). The public will need to be notified of all administrative changes to the plan.

Plans may have other content, such as background, collaboration strategies, context, existing conditions, glossary, introduction, monitoring questions, other referenced information or guidance, performance history, performance measures, performance risks, program emphasis, program guidance, program priorities, possible actions, roles and contributions, management challenges, or strategies, but such other content are not matters for which project consistency is required.

Maintaining the Plan

A land management plan is an integral part of adaptive management, including assessment, plan revision or amendment, and monitoring. This adaptive management cycle enables the Santa Fe NF to identify and respond to changing conditions, changing public desires, and new information, such as that obtained through research and scientific findings. Land management plan monitoring is an integral part of this adaptive management cycle, consisting of monitoring questions and indicators (see chapter 5 of the Plan for additional information about the monitoring plan).

A land management plan may be amended 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; land management plan monitoring; or other documentation of new information, changed conditions, or changed circumstances. The amendment and administrative change processes are described at 36 CFR 219.17(b)(2) of the 2012 Planning Rule.

Contact Person

For additional information concerning this decision contact Jennifer Cramer, Strategic Planning and Engagement Staff Officer, Santa Fe National Forest Supervisor's Office, 11 Forest Lane, Santa Fe, NM 87508, phone 505–438–5442.

Signature and Date

James Duran

Acting Forest Supervisor Santa Fe National Forest

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