United States Department of Agriculture
Forest Service

Southwestern Region
MB-R3-07-18
February 2014

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

Coconino, Yavapai, and Mojave Counties, Arizona

Cover: collage of four images—Kanab Wilderness, Abert squirrel, Ponderosa pine, and aspen.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means of communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TTY). To file a complaint of discrimination, write to USDA, Director of Civil Rights, 1400 Independence Avenue SW, Washington, DC 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TTY). USDA is an equal opportunity provider and employer.

Printed on recycled paper – February 2014

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

Coconino, Yavapai, and Mohave Counties, Arizona

Lead Agency:	USDA Forest Service
Responsible Official:	Calvin N. Joyner Regional Forester USDA Forest Service, Southwestern Region 333 Broadway Blvd. SE Albuquerque, NM 87102
For information, contact:	Michael R. Williams Forest Supervisor Kaibab Forest Supervisor's Office 800 S. 6th Street Williams, AZ 86046 (928) 635-8200 Mailroom_R3_Kaibab@fs.fed.us

In response to instructions provided by the Forest Service Chief's Reviewing Officer following appeals and administrative review, a correction was made to Response to Public Concerns section this Record of Decision after it was signed (02/03/2014). On page 17, paragraph 2, the following clarification was added: "or other legal mechanisms depending upon the scope and scale of the limitation."

Contents

Introduction

This public Record of Decision (ROD) documents my decision and rationale for approving the new Land and Resource Management Plan (Plan) for the Kaibab National Forest. This revised Plan provides Forest-specific guidance and information for project and activity decision making, and will guide all resource management activities on the Forest for the next 10 to 15 years. It replaces the previous Plan, which was approved in 1988 and has been amended 10 times.

Forest Setting

The Kaibab National Forest covers approximately 1.6 million acres in northern Arizona and is located mostly within Coconino County, with small portions in Yavapai and Mojave Counties. The Forest is broken into three geographically separate ranger districts. The North Kaibab Ranger District lies north of Grand Canyon National Park, the Tusayan Ranger District is south of Grand Canyon National Park, and the Williams Ranger District is southernmost, separated from the Tusayan Ranger District by private and State lands. The Kaibab shares boundaries with Grand Canyon National Park, the City of Williams, Town of Tusayan, Coconino and Prescott National Forests, BLM lands, Navajo Nation, Havasupai Reservation, and Camp Navajo, which is managed by the Department of Defense. Other nearby communities include Fredonia, AZ, Kanab, UT, and the Hopi, Hualapai, and Kaibab Paiute Reservations.

The Kaibab contains a diversity of vegetation types due to its range of elevation and soil types. Pinyon-juniper woodlands cover 40 percent of the Forest and are found at lower elevations. As elevation increases, pinyon-juniper transitions to ponderosa pine forest, which covers 35 percent of the Forest. Other vegetation types include mixed conifer, grasslands, sagebrush shrublands, Gambel oak shrublands, and desert communities. Aspen, riparian, and wetland vegetation is present in small, yet important, areas. This range of vegetation provides for a variety of wildlife habitat and recreation settings.

The Kaibab provides unique resources and recreation opportunities that attract a wide spectrum of forest users. Recreationists engage in a variety of activities such as hiking, camping, photography, bird watching, hunting, and driving/riding for pleasure. Tourism has played an increased role over the last 20 years. The proximity of the Forest to Grand Canyon National Park and historic Route 66 attracts visitors from across the Nation and throughout the world. Tourism-related activities contribute to local economies and opportunities. Many area residents have jobs or businesses that are dependent on Forest resources such as ranching, sandstone quarrying, wood harvesting, and outfitter-guiding.

American Indian tribes and people in nearby communities have long-standing connections to the Forest. The Kaibab has lands traditionally used by the Havasupai, Hopi, Hualapai, Kaibab Band of Paiute, Navajo, Yavapai, and Zuni people. The communities around the Kaibab were settled by Native Americans, Mormons, Spanish explorers, cattlemen, and loggers. This history continues to influence the culture today as western rural lifestyles and traditional uses are important to the local communities.

Land and Resource Management Planning

Nature of Forest Plan Decisions

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

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

The revised Plan is accompanied by a Final Environmental Impact Statement (FEIS), which provides analysis that discloses the environmental consequences of the alternative management strategies considered and discusses how these alternatives respond to issues and concerns raised during internal and collaborative processes.

The Revised Forest Plan

Forest plan revision on the Kaibab National Forest was initiated based on legal requirements and significant changes that have occurred in conditions, demands, and scientific understanding since the 1988 Plan went into effect. Need for revision is based on the following:

- The plan is beyond the 10 to 15 year duration provided by the National Forest Management Act (16 U.S.C. 1606(e)(5)(A)).
- Assessment of the sustainability of social, economic, and ecological Forest resources in light of continued management under the 1988 Plan indicated several needs for change, which are documented in the Analysis of the Management Situation (AMS), as required by the 1982 Planning Rule. The "Needs for Change" section later in this ROD provides further detail.
- New science and information has become available since the current plan was developed more than 25 years ago.

With this decision, the selected alternative will become the new Kaibab National Forest Land and Resource Management Plan. This revised Plan replaces the 1988 Plan. This new Plan is part of the long-range resource planning framework established by the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA), the Government Performance and Results Act of 1993 (GPRA), and the 2012 Revision of the USDA Forest Service Strategic Plan. The FEIS and revised Kaibab Forest Plan were developed according to the NFMA, its implementing regulations at 36 Code of Federal Regulations (CFR) 219; the National Environmental Policy Act of 1969 (NEPA), the Council of Environmental Quality (CEQ) regulations at 40 CFR 1500-1508, and the Forest Service NEPA regulations at 36 CFR 220.

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

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

Collaboration & Public Involvement

A variety of opportunities for meaningful dialogue and collaboration were provided throughout the plan revision process, including the initial ecological and socioeconomic sustainability assessments, development and finalization of the plan, and the consideration of effects in the Final Environmental Impact Statement. The Kaibab hosted multiple public meetings in nearby communities; meetings with local, state, federal, and tribal governments; and topic-based meetings on ecological sustainability, special areas, wildlife, monitoring, and adaptive management.

In addition to traditional public involvement activities, the Forest sponsored a series of stakeholder workshops supported by spatial modeling and analysis with the purpose of collaboratively developing a framework for restoring fire-adapted ecosystems. They identified high-priority treatment areas, helped to set objectives, and identified guidelines with high-levels of agreement. The Forest also hosted seven topic-based “collaborwriting” sessions and an online discussion forum that focused on plan and alternative content development and enabling adaptive management. Participants in the meetings and workshops included representatives from the US Fish and Wildlife Service, AZ State Game and Fish, Grand Canyon National Park, Sierra Club, Center for Biological Diversity, The Nature Conservancy, area Tribes, local interest groups, subject matter experts, private industry, and individuals.

Key partnerships with Northern Arizona University’s Lab of Landscape Ecology and Conservation Biology, The Nature Conservancy, Museum of Northern Arizona, Ecological Research Institute, Springs Stewardship Institute, Desert Botanic Gardens, Rocky Mountain Bird Observatory, and Arizona Game and Fish have provided valuable analysis and support throughout the plan revision process.

The notice of intent (NOI) to prepare an EIS was published in the Federal Register on April 23, 2010. At that time, the draft plan was posted to the Kaibab website and made available for review. Comments were used to iteratively make adjustments to the draft plan, identify issues, and develop alternatives.

Following the release of the Draft EIS and proposed plan on April 20, 2012, the planning team hosted public meetings in Williams and Fredonia, AZ. Presentations were given to the Williams City Council, Tusayan Town Council, Fredonia Town Council, Southwest Utah Planning Authorities Council, Cameron and Bodaway-Gap Navajo Chapters, livestock grazing permittees, and the Williams Rotary Club. Work sessions were held with Grand Canyon National Park staff and the Kane County (UT) Commissioners, to review plan and DEIS content, and to discuss concerns. Meetings were also held with the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, Kaibab Band of Paiute Indians, and Hopi Tribe to discuss comments.

Tribal Consultation

Coordination and collaboration with area tribes has been ongoing, with over 35 face-to-face meetings occurring over the past five years. The Forest held meetings with tribal elders,

government representatives, and community members. Additionally, the Forest hosted four intertribal meetings where members from different tribes were brought together with Forest managers and other agency representatives (National Park Service, Bureau of Land Management) to discuss shared topics of interest, including the Forest Plan. Tribal comments addressed a wide range of resources including springs, caves, pinyon, and traditionally used plants. The primary concerns were related to increased development on the Forest, resource extraction such as uranium mining, cultural resource protection, access to ceremonial sites, and availability of forest products for traditional and cultural purposes.

Needs for Change

In light of the changing circumstances on the Forest and availability of new information, four priority needs for change to the 1988 Kaibab National Forest Plan emerged from the Analysis of the Management Situation. These needs for change reflect aspects of management that would benefit most from updated Forest Plan direction. They are:

1. Modifying stand structure and density of forested ecosystems toward reference conditions and restoring historic fire regimes. In ponderosa pine and mixed conifer vegetation types, tree cover and fuels are far denser and more continuous across the landscape than in reference conditions. When wildfires occur under current conditions, they are increasingly likely to result in severe fire effects and kill large and old trees, which take many years to replace. The multiple ecological, social, and economic benefits of restoring historic stand structure and reducing the risk of uncharacteristic fires are primary areas of focus.
2. Protecting and regenerating aspen. This is a priority because of the important role aspen plays in providing local habitat diversity and scenery. Aspen stands are currently in decline throughout most of the Southwest. On the Williams Ranger District, most aspen stands are generally unhealthy because they are being overtopped by conifers, and there has been little to no recruitment of young trees due to ungulate browse and lack of fire.
3. Protecting natural waters. The Kaibab is one of the driest forests in the Nation. Most of the natural waters in the Forest are small springs and ephemeral wetlands. The 1988 Forest Plan offers little guidance for managing these rare and ecologically important resources. Natural waters are centers of high biological diversity, have traditional cultural significance, and are popular recreation destinations.
4. Restoring grasslands and meadows by reducing tree encroachment. There has been significant tree encroachment into grasslands over the past 100 years. This change has reduced the quantity and quality of available habitat for grassland-associated species. The montane and subalpine grasslands on the North Kaibab Ranger District are at particular risk of loss because their linear shape causes encroachment to occur more quickly.

In addition to these needs for change, there is a need to provide for sustainable uses that support vibrant communities and honor the Forest's human history, while meeting current management demands. The current departure of frequent fire ecosystems from reference conditions poses a risk to uses on and communities near the Forest through the increased likelihood of severe fire effects. There is also a need for clearer direction related to livestock grazing, traditional cultural properties and traditionally used resources, recreation opportunities, and special uses on the Forest. Finally, there is a need to establish a monitoring framework that enables adaptive management. Monitoring in the 1988 Plan was focused on outputs rather than progress toward attainment of desired conditions. The monitoring in the revised Plan uses the best available

information and focuses on outcomes and progress toward desired conditions through an iterative process that specifies data acquisition, assessment, and adaptive response.

Alternatives

This section describes the alternatives considered in this ROD in order to provide important context for the decision being made. The Kaibab analyzed four alternatives in detail: no action, the proposed action, and two alternatives developed in response to issues raised by the public.

Alternative A

Alternative A is the no action alternative, and recommends the continuance of the 1988 Plan (as amended) for the next 10 to 15 years. The 1988 plan:

- Emphasizes production of timber products; providing habitat for Mexican spotted owls, northern goshawks, and their prey; providing recreation opportunities to meet demand; livestock grazing; and improvement of soil resources.
- Is focused on outputs rather than outcomes that should be attained.
- Addresses uses and resources separately, without recognition of interrelationships between the two.
- Provides no or limited desired conditions for many important resources and uses, including grasslands, wetlands, springs, traditional cultural use, air quality, and noxious weeds.
- Contains standards and/or guidelines that are often unnecessarily prescriptive about how to implement a project, instead of focusing on the project's outcome; do not support attaining desired conditions or accomplishing outcomes; are sometimes duplicative and conflict with or reiterate direction found in other law, regulation, and policy; are based on outdated policy, science, and information; require the use of metrics that are difficult to use; and provide minimal guidance for mineral exploration and development.

Alternative B

In light of the needs for change and major themes outlined above and the iterative collaboration process, the Kaibab developed Alternative B, the revised Plan and proposed action. This alternative:

- Facilitates restoration of the structure, composition, and processes of frequent fire ecosystems by providing:
    - Desired conditions for forest and grassland ecosystems related to species composition; frequency, severity, intensity, and size of fire disturbance events; structural characteristics such as vegetation density, arrangement, age distribution; and key habitat components.
    - Objectives to use fire, mechanical treatments, and weed treatments to facilitate ecosystem restoration.
    - Standards and guidelines for vegetation management, forestry and forest products, and activities following large-scale disturbances to: 1) ensure minimum management requirements established by the 1982 Planning Rule are met, and maintain or establish a trajectory toward the desired vegetation composition and structure; 2) retain appropriate levels of snags, logs, and woody debris for resource benefits; 3)

manage for high quality scenery; and 4) minimize the spread of non-native invasive plants.

- Protects and restores rare and unique resources that support high levels of biodiversity such as aspen and natural waters by providing:
  - Desired conditions for springs and wetlands that describe healthy and functional physical and biological systems and that the location and status of springs and water resources are known, organized, and available; and objectives to protect and/or restore springs and restore the native vegetation and natural water flow patterns in wetlands.
  - Desired conditions for healthy aspen in natural patterns of abundance and distribution that provide diversity and wildlife refugia in an otherwise conifer-dominated landscape, and objectives to fence and reduce conifer encroachment in aspen.
  - Desired conditions that ensure there is habitat and refugia for species that are narrow endemics, have restricted distributions and/or declining populations; and a guideline that project design should incorporate measures to protect and provide for rare and narrow endemic species where they are likely to occur.
- Provides for sustainable uses that support vibrant communities and honor the Forest's human history, while meeting current demands, by:
  - Restoring ponderosa pine and frequent fire mixed conifer ecosystems, which would provide increased protection to communities, infrastructure, and watersheds.
  - •Generating wood through restoration-based thinning activities, which will increase the forest's contribution to timber related jobs and add diversity to the local economy.
  - Supporting traditional Western lifestyles by establishing desired conditions and guidelines that provide forage and opportunities for livestock grazing, while using adaptive management and balancing use and capacity consistent with the other desired conditions in the plan.
  - Establishing desired conditions and guidelines to provide access to Traditional Cultural Properties (TCPs) and privacy for ceremonial use by associated cultural groups; and to preserve TCPs consistent with their eligibility determination, minimize new facilities, and restrict commercial activities.
  - Establishing desired conditions, guidelines, and a monitoring item to ensure traditionally used resources are managed so they are not depleted and meet the needs of future generations.
  - Establishing two new management areas for the Red Butte and Bill Williams Mountain eligible TCPs.
  - Establishing cultural objectives related to educational and interpretive programs and cultural resource surveys.
  - Establishing desired conditions and guidelines that provide for diverse and sustainable recreation opportunities with an emphasis on remote recreational experiences; and implementing the Scenery Management System on the North Kaibab Ranger District, which would provide forest-wide consistency in scenery management.
  - Providing standards for certain special uses, including energy transmission and development, mineral and mining activities, and recreation special uses to ensure that authorization of these activities is consistent with the other desired conditions in the plan.

- Establishes a monitoring framework that enables adaptive management by providing an overall monitoring strategy and identifying the monitoring questions and data acquisition methods. These include remote sensing, rapid plots, existing data sources, and resource-specific strategies. It also contains components for a broader adaptive management framework, including an implementation guide and periodic assessment and review. The monitoring framework was developed with the 2012 Planning Rule in mind to facilitate the transition to the 2012 rule monitoring requirements. It also attempts to address key stakeholder concerns related to: 1) sufficient resources to accomplish the monitoring, 2) measurable variables, 3) ability to adapt in response to new information, and 4) robust study designs that provide statistically valid conclusions.
- Provides guidance for 17 management areas on the forest, six of which are carried over from the previous plan, seven of which lacked guidance in the previous plan, and four that are new.
- Identifies approximately 6,400 acres in four potential wilderness areas (PWAs) for wilderness recommendation.

Alternative C

Alternative C is similar to the proposed action, with certain differences in response to the following issues:

- The proposed plan does not adequately protect existing and provide for future old growth.
- Lands of high conservation value such as the Kaibab Squirrel National Natural Landmark should not be managed for timber or biomass production because regular mechanical disturbance can have adverse effects to soils and other resources.
- Areas should not be excluded from wilderness consideration just because they have evidences of past human activity, provided they are unnoticeable or could be rendered as such through restoration.

In response to the issue related to old growth, alternative C would replace the proposed vegetation management guideline "Project design and treatment prescriptions should generally not remove large, old ponderosa pine trees with reddish-yellow wide platy bark, flattened tops, with moderate to full crowns and large drooping or gnarled limbs (e.g., Thomson's age class 4 (Thomson 1940), Dunning's tree class 5 (Dunning 1928) and/or Keen's tree class 4 (A and B) (Keen 1943))" with "Project design and treatment prescriptions should generally not remove trees with physical characteristics typical of those that were established prior to 1890 (i.e., generally larger than 16 inches diameter at breast height, with yellowing platy bark)."

In response to the issue related to lands of high conservation value, alternative C would establish a management area on the North Kaibab Ranger District called the North Kaibab Wildlife Habitat Complex. This 260,000-acre area includes most of the Kaibab Squirrel National Natural Landmark and eight linked ephemeral riparian valleys and canyons. This management area would have a desired condition that the wildlife habitat complex provides effective wildlife linkages and core areas for wide-ranging species, and a guideline that states "Mechanical thinning would be used initially to restore the desired forest structure to the extent possible. Thereafter, the desired conditions should primarily be maintained with fire and other natural disturbances." Because this area would not be managed for timber or biomass production, it would be not be included in the suitable timber base.

In response to the issue related to wilderness, six additional PWAs totaling about 38,000 acres would be recommended for wilderness designation under Alternative C.

Alternative D

Alternative D is similar to the proposed action, but was developed in response to the issue that "the negative effects associated with regular mechanical disturbance outweigh the benefits. Restoring the natural fire regime to forested landscapes provides greater overall benefit to ecosystems, communities, and economies." Alternative D would contain the following forest-wide guideline: "Mechanical thinning would be used initially to restore the desired forest structure to the extent possible. Thereafter, the desired conditions should primarily be maintained with fire and other natural disturbances." Because no areas on the forest would be managed for timber or biomass production, there would be no lands identified as suitable for timber production. Alternative D also includes the same presettlement tree retention guideline and recommended wilderness as Alternative C.

Resource Planning Act Alternative

The provisions of the 1982 Planning Rule regulations at 219.12(f)(6) require forest plans to respond to and incorporate the Renewable Resource Planning Act Program objectives for each national forest as displayed in regional guides. There is no longer a regional guide for the Southwestern Region. This was withdrawn as required by the 2000 Planning Rule at 219.35(e). The last Renewable Resource Planning Act Program was developed in 1995. In lieu of the Renewable Resource Planning Act Program, the Forest Service Strategic Plan 2007–2012 provides broad overarching national guidance for forest planning and national objectives for the agency as required by the Government Performance Results Act. All alternatives in this FEIS address these broad strategic objectives.

Alternatives Considered but Eliminated From Detailed Study

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

Alternative that Would Reduce Grazing

This alternative was created in response to the issue that "livestock grazing by cattle and sheep causes watershed, stream, and grassland degradation." The Forest considered a reduced grazing alternative, but concluded it was unnecessary because under all of the alternatives, the livestock grazing program has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions.

Alternative that Would Recommend All Five of the Inventoried Roadless Areas for Wilderness Designation

Comments were received that supported recommending all five of the inventoried roadless areas (IRAs) identified in the 2001 Roadless Area Conservation Rule for wilderness designation. All of the IRAs on the Kaibab National Forest were evaluated during the potential wilderness evaluation process. Three of the IRAs were included in alternatives C and D, and two were considered in the wilderness evaluation, but not included in an alternative because they received low capability and availability scores in the evaluation process partially due to high severity fire effects and existing management needs that would be more efficient and effective if mechanical options were available.

Alternative that Would Use a Hands-off Approach to Manage Long-term Vegetative Health

This alternative was considered but not analyzed in detail because it would not address the priority needs for change. The greatest need for change is to restore fire-adapted ecosystems toward the desired reference conditions. The ponderosa pine and frequent fire mixed conifer forests currently have stand structure and accumulations of live and dead woody material that can lead to uncharacteristic and undesirable fire effects. With a hands-off approach, fire and other natural disturbances are the only available mechanisms for making progress toward reference conditions, which under current conditions could likely result in severe and uncharacteristic effects.

Alternative that Would include a Road Density Standard

An alternative was suggested that would include a road density standard of 2 miles of road per square mile of land. This alternative considered but not analyzed in detail because recent site-specific analysis and decisions have been made on all three of the forest's districts that identified the open road system. While it is desirable to minimize new roads and naturalize /rehabilitate unneeded roads, a road density standard would be arbitrary and would not meet the purpose and need.

My Decision

I select Alternative B for the new Land and Resource Management Plan for the Kaibab National Forest. The new Plan will:

- Restore the structure, composition, and processes of frequent fire ecosystems. This will reduce the risk of severe uncharacteristic fires, improve the resiliency of the Forest's natural ecosystems in the face of climate change, and increase the quality and quantity of important wildlife habitats.
- Protect and restore rare and unique resources that support high levels of biodiversity such as springs, wetlands, aspen, and habitats and refugia for species that are narrow endemics or have restricted distributions and/or declining populations.
- Provide for sustainable uses that support vibrant communities and honor the Forest's human history, while meeting current demands, by providing for forest conditions that protect communities, infrastructure, and watersheds; traditional and cultural forest uses;

sustainable recreation opportunities; and forest-based economic activities such as wood products industries and ranching.

- Establish a monitoring framework that enables adaptive management.
- Provide guidance for 17 management areas on the forest, six of which were carried over from the previous plan; seven that are specially designated areas that lacked guidance in the previous plan (Grand Canyon Game Preserve, the Wild and Free Roaming Burro Territory, the Kaibab Squirrel National Natural Landmark, National Trails, a National Scenic Byway, West-Wide Energy Corridor, and the Pediocactus Conservation Area); and four that are newly established (Red Butte, Bill Williams Mountain, Wildland Urban Interface, and Recommended Wilderness).
- Recommend approximately 6,400 acres to Congress for wilderness designation. These areas are adjacent to existing wilderness and will be managed to improve and/or maintain their wilderness values.

Components of the Decision

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

The decisions I am making in this Record of Decision for the new Kaibab Forest Plan are:

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

Forest-wide goals, termed in this plan as desired conditions, are found in Chapter 2 of the revised Plan. While the Plan addresses all uses and values of the Forest, the desired conditions emphasize 1) restoring ponderosa pine, frequent fire mixed conifer and grasslands to reduce the risk of uncharacteristic fire and improve ecological resilience in the face of climate change; 2) promoting aspen and protecting natural waters, which are important centers of biological diversity, and 3) providing for sustainable uses that honor the Forest's human history, while meeting current demands.

Objectives provide ways of achieving the desired conditions through specific actions and are established in the Plan's Chapter 2 for a full array of resources, uses, goods and services. Desired conditions and objectives are also established in the Plan's Chapter 3 for the Management Areas described above.

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

Forest-wide standards and guidelines are found in Chapter 2 of the revised Kaibab Forest Plan. Standards are limitations on actions or thresholds that are not to be exceeded. Guidelines are requirements that must be followed unless a different management action demonstrably achieves

the same intent as the guideline. After careful review, I believe that the standards and guidelines provide sufficient requirements for management, provide for resource protection, and reflect the intent of the new Plan. To simplify the planning document and to keep it up to date, laws, policies, Forest Service Manual, and Forest Service Handbook direction or other regional directives are incorporated by reference from the original source and are not duplicated in the plan.

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

The revised Plan provides direction for management areas that have specific management direction that differs from the general forest. Management areas are described and mapped in Chapter 3 of the Plan. The Plan provides desired conditions, objectives, standards and guidelines for 17 specific areas on the Forest. Two types of areas are identified: designated areas and management areas.

Designated areas (also known as special areas) are lands given special designation through statute or a preexisting administrative process due to their unique or special characteristics. Designated areas in the new plan are the Saddle Mountain, Kanab Creek, and Kendrick Mountain Wildernesses; Franks Lake Geologic-Botanical Area; Arizona Bugbane Botanical Area; Double A Wild and Free Roaming Burro Territory; Kaibab Squirrel National Natural Landmark; Grand Canyon Game Preserve; West-wide Energy Corridor; Kaibab Plateau-North Rim Parkway; and National Scenic and Recreation Trails.

Management areas are delineated to aid in management and provide plan direction for specific sites. Management areas established in the new plan are Recommended Wilderness Areas, Wildland-Urban Interface Areas, Developed Recreation Sites, Garland Prairie, Bill Williams Mountain, Red Butte, Buffalo Ranch, and Pediocactus Conservation Area.

Land within the Kaibab National Forest may be assigned to more than one management area. For example, the Arizona Bugbane Botanical Area is nested within the Bill Williams Mountain Management Area. In such cases, the most restrictive plan direction would apply to the area of overlap.

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

The analysis and discussion of lands suitable for timber production are found in Chapter 4 of the revised Plan. The land area designated suitable for timber production on the Kaibab National Forest totals 381,517 acres. The amount of wood that is estimated to be available for sale from the suitable land within the plan area for the first decade of plan implementation is called the allowable sale quantity (ASQ). The ASQ is better described as the “average allowable sale quantity” because it may be exceeded in a given year as long as the 10-year average is not exceeded. For this plan, the ASQ is 107,815 CCF (hundred cubic feet). This is a reduction from 152,300 CCF under the previous plan, which is due to the revised plan providing fewer acres of lands suitable for timber production, a shift from even-aged to uneven-aged management, and realistic, collaboratively developed acres and volumes to be treated annually. More information on timber suitability and ASQ is available in FEIS Appendix C.

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

During the analysis process leading to this decision, a total of about 96,000 acres was evaluated for potential wilderness across the forest. I recommend the 6,400 acres identified in the Recommended Wilderness management area for Congressional designation as Wilderness. The areas recommended all have high wilderness character and are adjacent to existing wilderness, which would provide for better manageability of the existing wilderness. Until Congress considers this recommendation, the plan has management direction for these areas to improve and/or maintain wilderness character.

Of the potential wilderness areas considered, but not being recommended for wilderness designation, almost half of the acres are within inventoried roadless areas (IRAs) and would be managed to maintain their roadless character. The other half are in semi-primitive areas with limited access. The plan components for these areas would retain their recreation and scenery settings.

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

The eligibility review process for Wild and Scenic Rivers completed under this forest plan revision analysis resulted in finding no new rivers or river segments eligible for inclusion in the National Wild and Scenic Rivers System. A 20 mile segment of Kanab Creek running through the Kaibab National Forest within designated wilderness has been listed since 1993 as eligible for classification as “wild” in the Nationwide Rivers Inventory. Interim management of Kanab Creek within the designated wilderness will maintain its eligibility as a classified wild river until a suitability study is completed. More information is available in FEIS Appendix F.

As previously described, the revised plan provides management area direction for eight designated areas that have been established through statute or a preexisting administrative process because of their unique or special characteristics. Kanab Creek is one such area.

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

Approximately 96 percent of the Kaibab National Forest is suitable for livestock grazing. The areas designated unsuitable for grazing were either closed to grazing in the 1988 Plan or have been closed to grazing based on site-specific NEPA decisions for grazing allotments. Since the 1988 Plan was approved, every active allotment on the Kaibab NF has received site-specific environmental review for the authorization of grazing. Chapter 4 of the revised Plan and Appendix D of the FEIS contain more information about the grazing suitability and capability determinations on the Forest.

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

Monitoring and evaluation requirements are found in Chapter 5 of the revised Plan. Specific monitoring questions are identified regarding achievement of desired conditions and objectives or meeting regulatory requirements. The monitoring plan strives to be realistic in terms of budget

and capacity, provides for robust study designs and statistically valid conclusions, and will facilitate adapting management in response to results and new information. Application of this monitoring plan will inform achievement of the desired conditions and objectives, and serve as the basis for adjusting management actions.

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

This determination is not a part of the revised Plan.

Rationale for Decision

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

Alternative B will most effectively reduce the risk of uncharacteristic disturbance from large high severity fires and insect epidemics in ponderosa pine and frequent fire mixed conifer. These disturbance events and their associated adverse impacts to soils, watershed, wildlife, visual quality, and other human uses and values present the most significant risks to ecosystem sustainability on the Kaibab National Forest. Alternative B best provides conditions supporting characteristic surface fire in ponderosa pine and frequent fire mixed conifer and providing forest conditions that maintain endemic levels of insect disturbance.

Alternative B includes a tree retention guideline that would not cut "mature" or "over-mature" trees, and would generally retain the largest and oldest trees. This allows for restoration using mechanical thinning that would retain ecologically important old trees yet allows for adequate reduction in stand density to prevent or minimize the effects of uncharacteristic, high-severity fire in ponderosa pine and frequent-fire mixed conifer.

The analysis shows that Alternative B best achieves a variety of desired ecological conditions. These include providing vegetative structures that are within the historic range of variation, more robust understory plant production and diversity, improved water yields to support ecosystem and human needs, providing for long term soil integrity and productivity, and restoring the natural fire regime. Alternative B also best protects and restores aspen by more effectively reducing competition from conifers, thereby providing for important wildlife habitat and scenery resources.

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

The level of landscape-scale forest restoration that is needed can only occur if there are markets for the wood removed in mechanical thinning. Alternative B designates the most suitable timber land of the action alternatives. This would provide a greater incentive for forest products industry to make investments in wood utilization infrastructure. Alternative B is expected to generate more forest products and sources of employment and income.

Alternative B includes recommended wilderness in several areas totaling about 6,400 acres that meet the wilderness inventory criteria, have high wilderness capability and would either improve the manageability of existing wilderness areas or include an outstanding, distinct landform feature. I believe these areas will make fine additions to the wilderness system.

I selected Alternative B rather than Alternative A because Alternative A does not address the needs for change identified in the Analysis of the Management Situation. The current plan has no articulated desired conditions for grasslands, wetlands, springs, traditional cultural use, or air quality. There are very few desired conditions for other resources. After reviewing the FEIS and summary in Table 2 of the FEIS, it is clear to me that Alternative A is generally the poorest of all the alternatives in terms of its ability to achieve desired conditions.

I selected Alternative B rather than Alternative C for several reasons. Alternative C includes a more restrictive tree retention guideline that would not cut trees with physical characteristics indicating they were established prior to 1890. Implementation of this guideline would be similar to management under Alternative B in areas where there are fewer older trees, but in other areas the inability to cut some “presettlement” trees could reduce the effectiveness of the treatments in protecting these older stands from uncharacteristic fire and insect threats, and would be less effective at improving herbaceous understory diversity (see “Comparison of Alternatives for Vegetation and Fire” in the Vegetation and Fire section of the FEIS). This alternative would also establish a “wildlife habitat complex” on much of the North Kaibab Ranger District that would allow mechanical thinning to initially reduce live tree density. Thereafter these areas would be maintained with fire. As a result, the forest lands on the North Kaibab would have little suitable timberlands. This would not provide any incentive for the forest products industry to make investments and would significantly limit the market-based assistance needed to accomplish landscape-scale restoration.

I selected Alternative B rather than Alternative D for same reasons described for Alternative C. Alternative D includes the same guideline and management approach described above for Alternative C, but expands that approach Forest-wide, which would result in no lands managed for timber production.

Alternative B recommends approximately 6,400 acres for wilderness designation, while alternatives C and D would both recommend about 44,000 acres. The potential wilderness areas in Alternative B possess the highest degree of wilderness character, and are adjacent to existing wilderness. The areas in alternatives C and D possess a lower degree of wilderness character, some of which have management needs that would be more difficult to address without mechanical or motorized means. Additionally, there is relatively abundant wilderness that currently exists in and around the Kaibab National Forest. The generally low use in these areas indicates a low need for additional wilderness. As a result, I am not currently choosing to include the potential wilderness areas included in alternatives C and D.

The revised Plan is responsive to the Forest Service's National Strategic Plan (2007-2012) and meets our legal obligations to the people and environment that surrounds them. The optimal implementation rate for the new Plan could require higher funding levels in some areas than those currently allocated; however, I believe the management direction changes envisioned in the new Plan are attainable under current budget levels. The achievement of desired conditions and outputs in some areas, however, may be prolonged or reduced if future budgets decrease or if wood processing infrastructure is not available within a feasible distance.

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

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

Response to Public Concerns

Many stakeholders shared their concerns and preferences during the collaboration and public involvement for the Kaibab plan revision. I have made my decision to select Alternative B with due consideration of the input from those diverse stakeholders. I will now share my views regarding the key concerns expressed for the Kaibab Plan and how my decision responds to those concerns.

Some stakeholders expressed concern that the Plan, as proposed, does not adequately protect existing and provide for future old growth. They requested that the Plan restrict the cutting of "presettlement" trees. In response to that request the EIS compared the proposed plan to alternatives that include a guideline that would retain trees determined to be established prior to 1890. The EIS analysis demonstrates that my decision better provides for old growth over time, compared to other alternatives, by more effectively reducing the risk of uncharacteristic fire. My decision provides for the protection and conservation of large old trees in two ways. First, it includes a requirement that project design and treatment prescriptions should generally not remove large old trees, mature trees with large mistletoe brooms, and large dead and "green" snags. Second, under certain stand structure conditions where large trees are more common, my decision allows for some older trees to be removed where needed to provide for breaks in the canopy and reduce the risk of stand replacing fire. By doing so, increased protection will be provided to the remaining large trees. I believe my decision best protects and provides for old growth.

Some stakeholders requested that much of the North Kaibab District be given special status due to its proximity to the North Rim of the Grand Canyon and certain attributes such as the Kaibab Squirrel Area National Natural Landmark designation. They suggest this area should be managed primarily for wildlife, native biodiversity, and allowing natural processes to prevail. Other stakeholders who also highly value the North Kaibab District want it to be managed not only for quality wildlife habitat and ecological values, but also for the full range of multiple uses in a balanced approach.

I acknowledge that the North Kaibab District is a special place that deserves protection and needs to provide quality wildlife habitat and biological diversity. My decision will do so because it

provides for forest restoration and maintenance of this fire adapted ecosystem over the long term and, as the FEIS analysis shows, most effectively reduces the risk of uncharacteristic fire. I do not believe the two viewpoints above are mutually exclusive. My decision represents a balanced approach to management that will provide for resource conservation and wise use of those resources over the long term. I believe my decision best meets my responsibilities set forth under the laws governing the National Forest.

Some stakeholders expressed strong preference for using fire rather than mechanical forest thinning for restoration treatments. While they acknowledge that some mechanical treatment may be needed initially, once those treatments are implemented fire should be the restoration tool emphasized by the Forest Plan. This approach is based on their concern that the negative impacts of periodic mechanical disturbance outweigh the benefits.

I agree that fire disturbance is necessary to maintain a healthy ecosystem on the Kaibab National Forest. My decision supports the judicious use of fire and its benefits. The EIS studied an alternative that would emphasize the use of fire, as suggested. While that approach made progress toward desired conditions, my decision on the Kaibab Forest Plan will more effectively meet the desired ecological, social, economic conditions. I understand concerns regarding mechanical disturbance to natural resources, as harvest and yarding of trees may lead to undesirable effects. The protective measures included in the Kaibab Forest Plan, the Forest Service requirements to use Best Management Practices, and the environmental protection laws we follow will minimize such undesirable effects.

Some stakeholders expressed concern that areas should not be excluded from recommended wilderness consideration just because they have evidence of past human activity, provided the evidence is substantially unnoticeable or could be rendered as such through restoration. The EIS studied alternatives that include areas with moderate wilderness capability as recommended wilderness. My decision recommends areas with high wilderness capability for congressional designation as wilderness. My decision also includes a desired condition that existing roadless areas, including those determined to have low or moderate wilderness capability are free from activities that alter their roadless character. Therefore, none of the roadless areas on the Kaibab National Forest are anticipated to be developed further.

Some stakeholders are concerned that livestock grazing causes watershed, stream, and grassland degradation. The grazing program on the Kaibab NF has multiple mechanisms to evaluate, review, and adapt management as needed to effectively protect resources and respond to changing conditions. Based on the concern, language was added to the Grazing Management Approach section of the Plan to ensure that the adaptive management process was more clear.

Some commenters claimed that the proposed plan lacked sufficient protections for Mexican spotted owl and northern goshawk habitat, particularly related to canopy. In response, language was added to the Kaibab Plan to clarify the desired conditions for tree groups and openings. Desired conditions were also added that at the fine scale higher canopy cover may be desirable, particularly in Mexican spotted owl nest and roost habitat; guidelines were added to retain large oaks; and language was added to better reference Recovery Plans.

Some commenters are concerned that the plan and EIS did not meet certain NEPA and NFMA requirements, such as grazing capability and suitability, species viability, minimum management requirements, and range of alternatives. In response, a consistency check with these requirements

and was added to the project record. The consistency check resulted in adding two plan standards that better reflect the minimum management requirements specified in the 1982 Planning rule.

Several stakeholders commented that the plan lacks needed standards and guidelines that were included in the original plan. In response, an appendix was added to the FEIS to track how key standards and guidelines from the original plan were addressed in the revised plan. Some were retained, some were converted to desired conditions, and some were dropped because they reiterated higher-level policy or were not supported by science. Additionally, the FEIS analyzes the original plan as Alternative A and compares it to the other alternatives.

Some commenters want the forest to ban the use of lead ammunition and uranium mining on the Forest. Both of these issues are beyond the scope of the plan revision. Prohibition of lead ammunition would require rule making or other legal mechanisms depending upon the scope and scale of the limitation. The decision to authorize uranium mining is subject to 1872 Mining Law.

Some commenters want the plan to include provisions for recreational aviation. The revised plan does not preclude recreational aviation, but the Kaibab does not currently have the infrastructure or accommodations to ensure the public safety and resource protection needed for recreational fly-in activities. As a result, site-specific analysis and/or a special use permit would be required.

Some commenters expressed concern for the potential effects of the bison herd on the North Kaibab on sensitive resources and adjacent lands. To address this concern, a guideline was added that "active management should be used to minimize impacts from bison to sensitive resources, particularly outside the Buffalo Ranch management area."

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

Environmentally Preferred Alternative

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

Alternative B, the proposed action, is the environmentally preferred alternative. This alternative's desired conditions, standards, guidelines, and objectives best provide the direction and management flexibility necessary to facilitate restoration of the structure, composition, and processes of frequent fire ecosystems and protect and restore rare and unique resources that support important habitats. It also ensures the protection of soil and watershed function; provides for threatened, endangered, sensitive, rare, and narrow endemic species; protects historic and cultural resources, and mitigates the effects of climate change.

Alternative B is the best at setting the ponderosa pine and frequent fire mixed conifer vegetation types on a trajectory toward achievement of desired conditions, thereby reducing the risk of uncharacteristic high severity fire. Aspen clones under this alternative are likely to be more resilient–able to withstand droughts and regenerate in place. Alternative B is best helping wildlife species cope with climate change because it provides for resilient ecosystems, and was found to

have the greatest ability to maintain viable wildlife populations over time. Alternative B would provide open conditions that are conducive to increased vegetative ground cover, which protects soil surfaces from erosion and prevents sediment delivery to water bodies. Improved herbaceous vegetative cover and reduced wildfire risk would result in increased sequestration of atmospheric CO2 and improve soil stability, hydrologic function, and nutrient cycling.

Net Public Benefits

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

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

Alternative B was shown conclusively to be the combined most ecologically and economically beneficial alternative and as such, it is the alternative with the greatest net public benefits. This alternative most effectively maintains or improves ecosystem integrity and the socioeconomic contribution of the Forest.

Science Consistency

The revised plan contains a strong framework for adapting management of Forest resources as new scientific information becomes available and plan monitoring reveals new or changing needs. Furthermore, I find that science was considered and applied throughout the revision process. Peer reviewed science was used whenever available, reliable, and applicable throughout the assessment process, the development of the plan, and preparation of the EIS. Extensive site-specific peer reviewed literature was available and used in the development of many plan components for many resource areas, particularly restoring ponderosa pine ecosystems. Less is known about the historical changes in composition and structure in the mixed conifer vegetation types, so the Kaibab commissioned a comparative analysis of inventory data from 1909 and the 1990s to determine changes in mixed conifer forest conditions on the North Kaibab Ranger District. In addition to published scientific literature and reports, the Kaibab solicited input from subject matter experts, used state-of-the-art ecological modeling, including the Forest Vegetation

Simulator (FVS) and the Vegetation Dynamics Development Tool (VDDT), occupancy modeling, and connectivity analysis.

I find this decision to be consistent with the application of the best available scientific information utilized throughout the plan development process during assessment of the original 1988 Plan for needs for change to better reflect management of the Forest, during plan development and evaluation, and during development of the plan monitoring program. Scientific conclusions are drawn from well-supported data sources, and data availability is disclosed. No unproven or controversial data or methods are used in analyses. Sources of information are referenced, and syntheses do not go beyond what the data indicate.

Compatibility with Goals of Other Public Agencies and Indian Tribes

Forest Service planning regulations require the agency to consider other federal, state, and local government and tribal plans and policies. As part of the collaboration effort in developing the revised Plan, the Kaibab engaged in a number of discussions with federal, state, local, and tribal representatives throughout the duration of the plan revision effort. The new Plan was developed collaboratively and was coordinated with Federal, State, and local agencies including the USDI Fish and Wildlife Service, Arizona Game and Fish Department, and local government and community leaders. Consultation with area tribes ensured the Plan components reflect tribal concerns and needs with respect to the Forest. Appendix L of the FEIS details the collaboration and coordination with other public agencies and tribes the Kaibab engaged in throughout the plan revision process and that no conflicts were identified.

Environmental Justice

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

Because of the high proportion of American Indian residents in the area addressed by the Plan and the generally low incomes of residents of nearby communities, decision makers on the Forest will pay careful attention to the potential health impacts of management actions upon these groups. Coconino County is 27 percent American Indian, with almost 50 percent of this population living in poverty. The per capita incomes in Fredonia and Williams are approximately 25 percent lower than those in Arizona and Coconino County. Key environmental justice concerns relate to smoke and air quality in low-lying communities, reliable and treatable water for the City of Williams, jobs, and hardship potential from wildfire evacuations.

Overall, the themes that form the foundation of the revised Plan, i.e., providing for social and ecological sustainability and resilience; emphasizing recreational, educational, and cultural opportunities; and providing for forest-based uses that contribute to local economies, should make the Kaibab National Forest a healthy and enjoyable place to work, reside near, or visit. Therefore, I find no disproportional effects to minority or low-income populations will occur from implementing the selected alternative.

Consultation with the Fish and Wildlife Service

The Kaibab National Forest prepared a Biological Assessment (BA) to evaluate the potential effects of the revised Plan on federally listed species, and where appropriate their critical habitat. The BA analyzed the potential effects on the threatened Mexican spotted owl (*Strix occidentalis lucida*) and its critical habitat, endangered California condor (*Gymnogyps californianus*), endangered Southwestern willow flycatcher (*Empidonax traillii extimus*), threatened Apache trout (*Oncorhynchus apache*), endangered loach minnow (*Tiaroga cobitis*) and its critical habitat, endangered spikedace (*Meda fulgida*) and its critical habitat, endangered black-footed ferret (*Mustela nigripes*), and proposed endangered Fickeisen plains cactus (*Pediocactus peeblesianus* var. *fickeisenias*) and its critical habitat.

This analysis concluded that the revised plan would have "no effect" on the black-footed ferret, Southwestern willow flycatcher; and loach minnow; would have "may affect, not likely to adversely affect" on the California condor outside its 10(j) population, Apache trout, loach minnow critical habitat, spikedace and its critical habitat, and Fickeisen plains cactus and its critical habitat (once it becomes listed); and would be "likely to adversely affect" the Mexican spotted owl and its critical habitat. The BA provides the determination of "not likely to jeopardize" for the California condor within the 10(j) area and the Fickeisen plains cactus and its proposed critical habitat. The BA was transmitted to the U.S. Fish and Wildlife Service on February 1, 2013, with a request for informal consultation and concurrence on the "may affect, not likely to adversely affect" determinations and formal consultation on the "likely to adversely affect" determination for the Mexican spotted owl.

In the September 10, 2013 Biological Opinion, the U.S. Fish and Wildlife Service (FWS) concurred with the determinations on the California condor, Apache trout, loach minnow, spikedace, and Fickeisen plains cactus, and determined that implementation of the revised Plan may affect the Mexican spotted owl and its habitat but would not jeopardize the species or adversely modify its designated critical habitat. The FWS anticipated incidental take of the species could occur as a result of implementing the revised plan, but identified reasonable and prudent measures necessary and appropriate to minimize the effects of take of Mexican spotted owls.

In order to be exempt from the prohibitions of section 9 of the Endangered Species Act, the Forest Service must comply with the terms and conditions of the incidental take statement in the Biological Opinion, which implement the reasonable and prudent measures. These terms and conditions are non-discretionary. The Final BO and associated terms and conditions can be found in the planning record.

Findings Related to Other Laws and Authorities

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

National Forest Management Act

The National Forest Management Act (NFMA) requires the development, maintenance, amendment, and revision of land and resource management plans for each unit of the National Forest System. These plans help create a dynamic management system so an interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences will be applied to all future actions on the unit (16 U.S.C. 1604(b), (f), (g), and (0)). Under NFMA, the Forest Service is to ensure coordination of the multiple uses and sustained yield of products and services of the National Forest System (16 U.S.C. 1604(e)(1)).

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

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

National Environmental Policy Act

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

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

The revised Plan does not represent an irreversible or irretrievable commitment of resources. The revised Plan is a programmatic level planning effort and does not directly authorize any ground-disturbing activities or projects. Future ground-disturbing activities and projects will be consistent with this revised Plan and subject to additional site-specific public involvement, environmental

analysis, and pre-decisional review processes. Therefore, the revised Plan is fully compliant with NEPA and CEQ implementation regulations.

Endangered Species Act

The purpose of the Endangered Species Act (ESA) is to provide 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, ESA requires federal agencies to ensure that any agency action does not jeopardize the continued existence of the species (ESA Section 7(a)(2)). ESA also requires the FWS and Forest Service, respectively, to base the biological opinion and subsequent agency action on the use of best scientific and commercially available data [16 U.S.C. 1536(a)(2)].

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

Multiple-Use Sustained-Yield Act

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

Clean Air Act

According to the Clean Air Act of 1990 and the Organic Administration Act of 1897, the Forest Service has the responsibility to protect the air, land, and water resources from the impacts of air pollutants produced within the Forest Service boundaries and to work with states to protect air resources from degradation associated with the impacts of air pollution emitted outside of Forest Service lands. The revised Plan contains desired conditions and guidelines to protect air quality. Furthermore, analysis of the effects plan implementation on air quality in the FEIS indicates that all alternatives are expected to achieve the desired conditions for air quality but that alternative B has the least susceptibility to uncharacteristic, high emission-producing fires, which have a high potential to negatively impact air quality, over time.

Clean Water Act

The revised Plan contains direction to provide for the maintenance or improvement of water quality in the natural and constructed waters of the Forest. Furthermore, reducing the risk of uncharacteristic high-severity fire will facilitate protection of crucial water sources such as the City of Williams municipal water supply. Overall, implementation of the revised Plan is expected to contribute to protecting or restoring the physical, chemical, and biological integrity of waters of the Forest in accordance with the Clean Water Act.

National Historic Preservation Act

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

Plan Implementation

Project Consistency

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

As required by NFMA and the planning rule, subject to valid existing rights, all projects and activities authorized by the Forest Service after approval of this revised Plan must be consistent with the applicable plan components (16 U.S.C. 1604(i)) as described at 36 CFR 219.15 of the 2012 Planning Rule. (Although the transition provisions at 36 CFR 219.17 of the 2012 Planning Rule allow revision of this Plan under the 1982 regulations, subsequent projects or activities approved on units with plans revised under a prior planning rule must comply with the consistency requirement at 219.15 of the current rule.)

Consistency with the revised plan will be achieved by developing management activities that are designed specifically to achieve the desired conditions and objectives of the new Plan and are guided by relevant standards and guidelines. To the extent practicable, documentation for such projects should identify the elements of the desired conditions, goals, or objectives to be achieved by the project. It should not be expected that all projects or activities would contribute to all desired conditions, goals, or objectives, but rather to a limited subset. It should also be recognized that some projects designed to contribute to some desired conditions, goals or objectives may have consequences considered adverse to the achievement of other desired conditions, goals, or objectives. In this situation, the responsible official for the project needs to identify and disclose these effects in the project documentation and make a decision that balances these considerations.

A project or activity approval document must describe how the project or activity is consistent with the Plan by the criteria listed at 36 CFR 219.15(d) (2012 Planning Rule). Where a proposed

project or activity would not be consistent with Plan direction, the responsible official has the following options (36 CFR 219.15(c) 2012 Rule):

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

Any resource plans (e.g. travel management plans) developed by the Forest Service that apply to the resources or land areas within the planning area must be consistent with the Plan components. Resource plans developed prior to plan decision must be evaluated for consistency with the plan and amended if necessary (36 CFR 219.15(e) 2012 Rule).

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

A forest plan is used as a direction source for future projects, plans, and assessments. It is not expected that this new direction be used to re-evaluate or change decisions that have been made under the 1988 Plan. A smooth and gradual transition to the new Plan is anticipated, rather than one that forces an immediate reexamination or modification of all contracts, projects, permits, and other activities that are already in progress. As new project decisions, contracts, permits, renewals, and other activities are considered, conformance to the revised Plan direction is expected.

Implementation Schedules and Budgets

The revised Plan will be implemented through a series of project-level decisions based on site-specific environmental analysis and public involvement. These analyses will be documented in the appropriate NEPA documents. The Plan seeks to guide management activities and projects by establishing clear desired conditions for the Kaibab National Forest rather than by establishing schedules for actions. This approach should leave more flexibility for managers to adapt program and project selection as changes take place in budgets, resource capabilities, and management priorities.

Outputs in the FEIS are projections of probable outcomes. They were used to approximate activities and practices, in order to estimate the likely environmental effects of following the direction provided by the revised Plan.

Maintaining the Land Management Plan and Adapting to New Information

Adaptive Management

A land management plan is an integral part of an adaptive management cycle that guides future management decisions and actions. Adaptive management includes:

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

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

Monitoring and Evaluation

Monitoring and evaluation are used to assess the degree to which on-the-ground management is maintaining or making progress toward the desired conditions and objectives in the plan. The monitoring program is described in Chapter 5, "Monitoring and Evaluation," of the Plan. This monitoring program was developed collaboratively and focuses on key plan components where management projects and activities are likely to cause a change over time.

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

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

Plan Amendments

A forest 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, forest plan monitoring, or other documentation of new information and changed conditions or circumstances. The amendment and administrative change process is described at 36 CFR 219.17(b)(2) of the 2012 Planning Rule.

The revised Plan is a dynamic instrument that can be changed with appropriate public involvement and environmental analysis. Throughout the life of the Plan, amendments may be needed to incorporate new information, new policy and direction, or changing values and resource conditions. Amendments will keep the Plan current, relevant, and responsive to agency

and public concerns. Amendments are needed whenever any of the Plan decisions should be changed due to any of the above conditions. The Plan also can be amended for specific projects if during project design it is determined that the best method of meeting goals and objectives conflicts with standards and guidelines in the Plan. Deviation from a guideline must be specified in the decision document with supporting rationale. When deviation from a guideline does not meet the original intent, a plan amendment is required. Any deviation from a standard requires a plan amendment.

A 3-year transition period for plan amendments begins on the effective date of the 2012 Planning Rule, on May 9, 2012. During the transition period, plan amendments may be initiated under the provisions of the 1982 Planning Rule, or may conform to the requirements of the 2012 Planning Rule. Plan amendments initiated after the transition period must conform to the requirements of the 2012 Planning Rule.

Under the 1982 planning provisions, amendments may be significant or non-significant. The Forest Supervisor may implement non-significant amendments to the Revised Forest Plan after appropriate public involvement and environmental analysis. The Regional Forester approves significant amendments.

Effective Date

The revised Kaibab National Forest Land and Resource management Plan will become effective 30 days from the date that the Environmental Protection Agency's Notice of Availability of the FEIS appears in the Federal Register (per 36 CFR 219.17(a), 2012 Rule).

Appeal Information

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

A written notice of appeal must be filed in duplicate and postmarked or received within 90 days after the date the legal notice of this decision is published in the newspapers of record for the Kaibab National Forest (The *Arizona Daily Sun*). The appeal must clearly state that it is a Notice of Appeal being filed pursuant to the Optional Appeal Procedures. Appeals must meet the content requirements of Section 9 of the Optional Appeal Procedures, which are available for review at: http://www.fs.fed.us/emc/applit/includes/PlanAppealProceduresDuringTransition.pdf

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

Physical address (for UPS and FedEx deliveries):
USDA Forest Service
Attn: Appeal Reviewing Officer
210 14th Street, SW
EMC-JAR, Mailstop 1104
Washington, DC 20250

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

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

Appeals may also be faxed (Fax number is 703-235-0138) or appeals may be mailed electronically in a common digital format to: appeals-chief@fs.fed.us.

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

A statement that the document is a Notice of Appeal filed pursuant to the Optional Appeal procedures;

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

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

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

Recommendations for designations such as additions to the National Wilderness System are preliminary administrative recommendations that will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and/or the President of the United States. The Congress has reserved the authority to make final decisions on wilderness on federal lands; therefore, wilderness recommendations in the Revised Plan are not

appealable under the agency's administrative appeal procedures (Section 4 of the Optional Appeal Procedures).

I encourage anyone concerned about the revised Kaibab National Forest Land and Resource Management Plan or Final Environmental Impact Statement, or who would like more information, to contact:

Michael R. Williams
Forest Supervisor
Kaibab Forest Supervisor's Office
800 S. 6th Street
Williams, AZ 86046
(928) 635-8200

Approval

I am pleased to announce my decision to select Alternative B for the revised Land and Resource Management Plan for the Kaibab National Forest. This new Plan has been built on a strong foundation of citizen collaboration, the best available science, and engagement with other conservation agencies and organizations.

2/3/14

Calvin N. Joyner
Regional Forester
Southwestern Region, USDA Forest Service

Date