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Supplemental Rangeland Specialist Report

Forest Plan Revision DEIS

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Preface

The information in this specialist report reflects analysis that was completed prior to and in conjunction with the completion of the Draft Environmental Impact Statement (DEIS) for the revision of the 1987 Coconino National Forest Land Management Plan (the Plan). The primary purpose of specialist reports associated with the DEIS is to provide detailed information to assist in the preparation of the DEIS. As the DEIS was prepared, review-driven edits to the broader DEIS resulted in modifications to some of the information contained in some of the specialist reports. As a result, some reports no longer contain information and analysis that was updated through an interdisciplinary review process and is included in the DEIS in its entirety. This specialist report retains the additional information on the environmental consequences that was not included in the summarized information in the DEIS. However, analysis and information for this resource that is included in its entirety in the DEIS is not duplicated in this report. Efforts have been made to ensure that the retained information in the specialist reports is consistent with the DEIS. If inconsistencies exist between specialist reports and the DEIS, the DEIS should be regarded as the most current, accurate source of analysis

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Introduction

This specialist report evaluates and discloses the environmental consequences not included in the Draft Environmental Impact Statement on the livestock grazing that may result from the adoption of a revised land management plan.

Range management on the Coconino National Forest has changed dramatically since the early 1900's. In the early days of the Forest grazing was largely unregulated and the range was typically grazed by cattle, sheep, and horses. During the 1930's fences began to divide the Forest into permitted grazing allotments. The peak of grazing was during World War II when congress demanded as much protein as possible from these rangelands. In the late 1960's and early 1970's a shift in public attitude regarding the use of public land emerged. Congress passed the National Environmental Protection Act (NEPA) in 1969, directing land managers to address the environmental consequences of activities on federal lands. As a result of NFMA Forest Management Plans (FMP) were prepared for every national forest that is administered by the United States Department of Agricultural (USDA). The purpose of these FMPs was to address the status of forest resources which included livestock grazing and to develop a solution to meet long term goals and gazing on forest lands.

In 1976, Congress Passed the Federal Land Policy Management Act (FLPMA). This act requires that public domain lands be managed for multiple uses. It also reaffirmed the Forest Service authority to reduce livestock numbers if necessary. Perhaps most importantly, it provided for the preparation of Allotment Management Plans (AMP) in consultation, coordination, and cooperation with permittees for each grazing permit. The Public Rangeland Improvement Act, passed by Congress in 1978, established a grazing fee formula that sets and adjusts annual fees for grazing on public domain lands.

In 1987 the Coconino National Forest (NF) completed a Forest Management Plan that identified capable and not capable rangelands for livestock grazing. This was updated in mid 2011 with a current suitability/capability report which identifies acres that are capable of supporting livestock grazing based on Coconino NF criteria (Slope, Soil, and Vegetation production) and those acres that are suitable for livestock use (Appendix I).

The Coconino National Forest (NF) has 35 livestock grazing allotments, covering approximately 1,837,498 acres. Currently there are two allotments that have portions of their acres permanently removed by decision from livestock grazing for the purpose of resource protection and one area that was removed by federal legislative action for the purpose of creating the Walnut Canyon National Monument. These acres are considered non-suitable to livestock grazing.

This specialist report evaluates and discloses the potential environmental consequences on the rangeland resource that may result with the adoption of a revised land management plan. It examines, in detail, four different alternatives for revising the 1987 Coconino National Forest Land Management Plan (1987 Plan).

Climate Change

- Based on Multi-Model ensemble climate models, by the end of the century, the Southwest is likely to experience
 - Temperatures increases of 5 to 8 degrees Fahrenheit.
 - An increase in the number of extremely hot days, with summer heat waves lasting two weeks or longer.
 - Warmer winters and reduced snowpack, and a later monsoonal season.
 - A 5 percent drop in precipitation in most of Arizona and New Mexico; possible 10 percent drop in southern Arizona.
 - An increase in extreme flood events following an overall increase in tropical storms.
 - Projected decreases in precipitation, reduced snowpack, and overall water availability.
 - Increased risk from wildfire, insects and disease, invasive species.
 - Potential decrease in ecosystem productivity from water limitations and increased heat.
 - Potential impacts to alpine, riparian, wetland, sky Island, and aquatic habitats.

[R3 Climate Change Planning](http://fsweb.r3.fs.fed.us/eap/climate/index.shtml)

[website http://fsweb.r3.fs.fed.us/eap/climate/index.shtml](http://fsweb.r3.fs.fed.us/eap/climate/index.shtml)

[WO Climate Change website](http://www.fs.fed.us/ems/nepa/climate_change/index.htm)

www.fs.fed.us/ems/nepa/climate_change/index.htm

Relevant Laws, Regulations, and Policy that Apply

The Taylor Grazing Act (1934) and FLPMA provide the underlying direction for livestock grazing on Forest Lands. FLPMA directs that Forest Service Lands, not otherwise designated would be managed on a basis of multiple use principles and for the purpose of sustained yield. These concepts are further established within the Coconino NF Management Plan (1987)

All alternatives are designed to guide the Coconino NF's management activities in meeting all applicable Federal and State laws, regulations, and policies which include:

- Endangered Species Act - 1973
- Wilderness Act - 1964
- Migratory Bird Treaty Act (1918 as amended) and Executive Order (1/11/01).
- NEPA – 1969
- National Forest Management Act (NFMA) – 2008
- Clean Air Act – 1970
- Clean Water Act – 1972
- Multiple Use-Sustained Yield Act of 1960

- National Historic Preservation Act (NHPA) of 1966, as amended
- Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, as amended
- American Indian Religious Freedom Act of 1978
- Executive Order 13007 (Indian sacred sites)
- Executive Order 12898 (Environmental Justice)
- Forest Service Sensitive Species: FSM 2621.2
- Management Indicator Species: 36 CFR 219, FSM 2621 and 1920

Assumptions

In the analysis for this resource, the following assumptions have been made:

- The land management plan provides a programmatic framework for future site-specific actions.
- Land management plans do not have direct effects. They do not authorize or mandate any site-specific projects or activities (including ground-disturbing actions).
- Land management plans may have implications, or environmental consequences, of managing the forests under a programmatic framework.
- The plan decisions (desired conditions, objectives, standards, guidelines, management areas, monitoring) will be followed when planning or implementing site-specific projects and activities.
- Laws, regulations, and policies will be followed when planning or implementing site-specific projects and activities.
- Monitoring will occur and the land management plan will be amended, as needed.
- We will be funded similar to past budget levels (past 5 years).
- The planning timeframe is 15 years; other timeframes may be analyzed depending on the resource (usually a discussion of anticipated trends into the future).

Issues Addressed in this Analysis

Issues serve to highlight effects or unintended consequences that may occur from the Proposed Action and alternatives, giving opportunities during the analysis to reduce adverse effects and compare trade-offs for the decision maker and public to understand. This document will analyze the proposed action and alternatives for the effects of livestock grazing on public lands over the forest as a whole.

General public concerns received within the Coconino NF office over the last several years discuss the need to revoke grazing allotment permits and to modify grazing intensity (number of animal unit months and length of season of use) so as to reduce the impacts of livestock grazing on vegetation and wildlife. Changes to allotment, animal unit months, or length of use can be made outside of the FMP/EIS process on an as-needed basis. Further, a review of the impacts of grazing on associated resources would be conducted at the site-specific level as part of the allotment analyses.

Summary of Alternatives

Four alternatives are analyzed in detail in this Specialist Report: Alternatives A through D. Alternative A is the current 1987 Coconino National Forest Plan, and Alternative B is the Proposed Action, drafted over the past several months and refined with several branches of internal and informal public feedback. Alternative C considers increases in the amount of wilderness and special areas, as well as increased opportunities for quiet semi-primitive recreation, while Alternative D considers slightly fewer restrictions than Alternatives B and C on human access and use of the Forest and its resources.

Supplemental Information for the Description of Affected Environment

The affected environment for livestock grazing is described in the Draft DEIS.

Supplemental Information on Current Management

The 1987 plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Because the land management plan does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions), there can be no direct effects. However, there may be implications, or long-term environmental consequences, of managing the forests under this programmatic framework.

Rangeland assessments would continue under all four alternatives at the allotment scale to determine if the desired conditions for rangeland health are being achieved. Implementation of the policies for grazing administration would be in accordance with the USDA Forest Service Manual 2200: Range Management, its accompanying Rangeland Health Forest Service Handbook 2200:13 and Title 43 Code of Federal Regulations Subpart 4180. During the administration and/or monitoring of an allotment, if it is determined that the desired conditions are not being achieved, grazing management practices and/or the current levels of the grazing use would be modified in cooperation with the permittee. These changes or modifications would be in accordance with established procedures to ensure that the grazing management practices or the levels of the grazing use are in conformance with the policies.

Supplemental Environmental Consequences and Cumulative Effects

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Because the land management plan does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions), there can be no direct effects. However, there may be implications, or long-term environmental consequences, of managing the forests under this programmatic framework.

Almost all of the 1.8 million acres of public land within the forest planning area, with the exception of 33,173 acres within the two allotments and the Walnut Canyon National Monument Area are currently available for livestock grazing, based on decisions included in the previous Coconino NF Management Plan (1987). The changes to suitability of the public lands administered by the Coconino NF for livestock grazing are evaluated by alternative in this planning document.

Table 1. A Brief Summary of Alternatives and Effects to Livestock and Livestock Management.

Alternative	Proposed effects to Livestock or Livestock Management	Note:
A. Current Plan 1987	None: Current Management Plan	33,173 acres are considered non-suitable to livestock grazing. Livestock grazing within RNAs is very light to non-existent.
B. Proposed Land Management Plan	<p>No effect/ same as Alt. A</p> <ul style="list-style-type: none"> • 2 to 8 new systems of designated trails for recreation • Thin 50,000 to 260,050 acres of ponderosa pine cover based on approximately 600,000 acres of manageable timber land and treat 1,000 to 10,000 acres of Pinion/Juniper vegetation types during the next 10 years following plan approval • use of prescribed fire through natural ignition 3,750 acres with low to mixed severity in Pinion/Juniper and Pinion/Juniper grasslands, 135,000 to 300,000 acres of fire in ponderosa pine, ponderosa pine-evergreen oak and mixed conifer forest during the 10 years following plan approval 	<p>Same acres would remain unsuitable and remain closed to grazing.</p> <p>Escalating recreational demand would continue to create new conflicts with livestock grazing</p> <ul style="list-style-type: none"> • This could require short-term changes to livestock use such as temporary reductions in livestock grazing and temporary closure of the treatment areas on affected allotments These treatments would ultimately increase available acres to livestock allowing for improved distribution.
C	Livestock grazing would be	Only two RNAs currently

Alternative	Proposed effects to Livestock or Livestock Management	Note:
	removed from all Research Natural Areas unless to benefit research. Motorized traffic would be prohibited in Anderson Mesa MA.	have livestock grazing Rocky Gulch RNA and the West Clear Creek RNA. Both RNAs only have slight to no livestock grazing. Effects would be negligible. Anderson Mesa MA would have immediate effect to livestock management.
D	No Effect	

Assumptions for Analysis

- Market demands for livestock products are highly variable. It is assumed that current market demands for livestock products would continue throughout the next several decades with a continuing demand for grazing of the forest lands.
- Livestock grazing use would be authorized dependent on forage availability
- The Arizona Game and Fish Department manage populations of big game (i.e. mule deer, elk, pronghorn antelope, and bighorn sheep).

Interactions with Other Programs

The livestock grazing on the Coconino NF potentially would be affected by other Forest Service activities and decisions and permitted uses such as vegetation treatments, prescribed burning, recreation, lands exchange, travel noxious and invasive weed management, and special designations.

Alternative A. 1987 Plan.

The effects from livestock grazing management actions under Alternative A are described in the Draft DEIS.

Alternative B. Proposed Land Management Plan

The effects from livestock grazing management actions under Alternative B are described in the Draft DEIS.

Alternative Plan C.

The effects from livestock grazing management actions under Alternative C are described in the Draft DEIS.

Alternative D.

The effects from livestock grazing management actions under Alternative D are described in the Draft DEIS.

Cumulative Impacts

The cumulative impacts associated with livestock grazing management actions are described in the Draft DEIS.

Unavoidable Adverse Impacts

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Before any ground-disturbing actions take place, they must be authorized in a subsequent environmental analysis. Therefore, none of the alternatives cause unavoidable adverse impacts. Mechanisms are in place to monitor and use adaptive management principles in order to help alleviate any unanticipated impacts that need to be addressed singularly or cumulatively.

Irreversible and Irretrievable Commitment of Resources

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Because the land management plan does not authorize or mandate any ground disturbing actions, none of the alternatives cause an irreversible or irretrievable commitment of resources.

Adaptive Management

All alternatives assume the use of adaptive management principles. Forest Service decisions are made as part of an ongoing process. The land management plan identifies a monitoring program. Monitoring the results of actions will provide a flow of information that may indicate the needs to change a course of action or the land management plan. Scientific findings and the needs of society may also indicate the need to adapt resource management to new information.

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