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# Record of Decision for Deep Lake Allotment

Mormon Lake Ranger District,  
Coconino National Forest,  
Coconino County, Arizona

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# Background

This Record of Decision documents my decision for the Deep Lake cattle grazing allotment, located approximately 9 miles southeast of Flagstaff, Arizona. This allotment lies in the eastern portion of the Mormon Lake Ranger District of the Coconino National Forest.

The Deep Lake Allotment consists of about 10,994 acres, which are in one main pasture. The Deep Lake Allotment runs along the northeastern edge of Anderson Mesa and is located within all or portions of T20N, R9E, Sections 10-15, 21-25, and 32-36, and T19N, R9E, Sections 1-5.

Primary vegetation on the Deep Lake Allotment consists of pinyon-juniper woodland that extends above and below the Anderson Mesa rim. A band of ponderosa pine is found along the Anderson Mesa rim and Mormon Canyon and isolated meadows exist within the northern portion of the allotment. Deep Lake is the only semipermanent wetland within the allotment and Horse Tank was recently reclassified as a seasonal wetland. Adjacent to, but outside of the Deep Lake Allotment, Horse Lake is already fenced to permanently exclude cattle from grazing.

The Deep Lake Allotment is scheduled for environmental analysis of grazing use on the Coconino National Forest, as required by the 1995 Burns Amendment.

A Notice of Intent (NOI) to prepare an EIS was published in the "Federal Register" on December 28, 2004 and a proposed action was mailed to a list of people who expressed interest in the project, or who were otherwise determined to be affected. During this public scoping period, two issues were identified. The first issue brought attention to the unfenced portion of Deep Lake that would remain accessible to cattle grazing on the adjoining Pickett Lake Allotment. The second issue was concerned with the proposed cattle numbers, 35 percent utilization level, and season of use. These issues led to the development of Alternatives 4 and 5 in the environmental impact statement (EIS).

The purpose of this analysis was to determine whether or not to re-authorize cattle grazing and set grazing levels within the carrying capacity for the Deep Lake Allotment. There is a need to continue maintaining and improving rangeland conditions and to maintain and protect semipermanent wetlands. New fencing is also needed around stock tanks for better distribution of cattle.

A project record document (PRD), located at the Peaks Ranger District, contains supporting information and reference materials related to this Record of Decision.

# Decision

After considering information provided in the EIS, substantive comments received from the public, and internal Forest Service specialist input, **I have selected Alternative 4 for the Deep Lake Allotment.**

This alternative was developed in response to reclassification of Horse Tank as a seasonal wetland and public scoping comments on the proposed Deep Lake enclosure (Proposed Action/Alternative 3).

Specifically, Alternative 4 will authorize cattle grazing on the Deep Lake Allotment for up to 105 cattle from May 1 through October 31. There will be a 35 percent *utilization* guideline by cattle and/or wildlife. There will be a “moderate” seasonal utilization guideline which is measured before the end of the growing season and is used when determining pasture moves. Cattle will move from one area to another when seasonal utilization approaches a “moderate” level, approximately 21 to 50 percent.

In addition, the following activities will be implemented under Alternative 4:

**Fence seasonal and semipermanent wetlands and provide lanes to access water in stock tanks:** A 2-mile enclosure fence will be built around Deep Lake to protect most of the emergent vegetation (52 acres) and surrounding upland buffer (156 acres) at this semipermanent wetland. The enclosure fence design will include two lanes for cattle to access stock tank waters (permitted water claims) from both the Deep Lake and Pickett Lake Allotment sides of the wetland. The 2 lanes will include a total of 10 acres of emergent spikerush vegetation and 31 acres of upland buffer. The excess allotment boundary fence in the middle of Deep Lake will be removed (0.3 mile of fence) once the enclosure is built.

A 1-mile enclosure fence will be added onto the existing Horse Lake fence in order to protect all of the emergent vegetation (10 acres) and most of the surrounding upland buffer (8 acres) at the Horse Tank seasonal wetland. The enclosure will be designed to include a lane to Horse Tank, built on an existing elevated earthen berm of soil that has no emergent vegetation and 1 acre of upland buffer. The east side of the existing Horse Lake enclosure will be removed where the existing fence and new Horse Tank fence come together (0.5 mile of fence).

**Structural and nonstructural improvements:** Five waterlots (fences) will be built around five stock tanks. These waterlots will be designed so water is accessible to wildlife, which will include a smooth bottom wire, 18 inches high, as well as wildlife jumps on all sides. The locations of these waterlots will allow the permittee to control access to water for cattle at these stock tanks.

# Rationale

I selected Alternative 4 because cattle grazing is a legitimate use of National Forest System lands and through this analysis, it demonstrates that cattle grazing can be managed along with other resources (i.e. wetlands, wildlife, vegetation, soils, water quality). Thus, I did not select Alternative 2 (no grazing). I believe Alternative 4 best manages riparian areas in comparison with Alternatives 1 and 3. Providing yearlong protection to Deep Lake and Horse Tank will exceed Forest Plan riparian direction and protect the best riparian nesting habitat for waterfowl on the Deep Lake Allotment. After reviewing condition and trend monitoring and considering changes in cattle distribution via the proposed 5 waterlots, I believe that the 35 percent utilization guideline was appropriate and there was not a need to use a 20 percent utilization guideline (Alternative 5).

Alternative 4 meets the project's purpose and need by maintaining and/or improving rangeland conditions; maintaining and protecting seasonal and semipermanent wetlands with emergent vegetation; and providing new fencing for better cattle management on this allotment. My rationale for selecting Alternative 4 integrates the following:

## *Maintaining and/or improving rangeland conditions where cattle grazing occurs:*

Rangeland condition is a comparison of existing vegetation and soil conditions to either the potential natural community or desired plant community. Rangeland management status is considered to be in satisfactory condition when the existing vegetation community is similar to the desired condition, or short-term objectives are being achieved to move the rangeland toward desired conditions.

Condition and trend monitoring determines the effectiveness of the allotment management plan, and long-term range and watershed trends. Contributing information to the condition and trend monitoring are rangeland utilization, soil and riparian condition, forage production, range readiness, and climate. Refer to the EIS, Chapter 3, "Vegetation" and Chapter 4, "Monitoring." The Forest Plan Consistency Check has also considered standards applicable to rangeland condition [PRD 7].

- Alternative 4 will improve the rangeland condition for vegetation and soils where they are fenced in seasonal and semipermanent wetlands. This will likely result in a static to upward trend (from a current static to downward trend).
- The grazing system in Alternative 4 will reduce the ability of cattle to re-graze plants and progress toward better production, diversity and vigor of understory plant species.
- Outside of wetlands, Alternative 4 maintains soils and vegetation rangeland conditions as it relates to cattle grazing. As noted in the EIS (Chapter 3, "Vegetation"), cattle contribute to impaired soil conditions on 213 acres (Table 8). The fencing of the wetlands and construction of waterlots will either completely remove cattle grazing from these areas or the improved cattle management will improve these soil conditions. For vegetation, there is a static to downward trend in juniper grasslands below the Anderson Mesa Rim, but this trend is mostly affected by increasing density and encroachment of trees into these areas. Even if cattle were removed, the vegetative trend will not improve because the trend is tied to tree density and encroachment. This analysis/decision is not proposing any actions to reduce tree density and encroachment. The tables in Appendix B list several past,

present, and reasonably foreseeable activities related to restoring grasslands and meadows (i.e., vegetation treatments).

- Ponderosa pine areas will be maintained as static to upward. Pinyon and juniper grassland areas above the rim will be maintained as static. Lake and deep soil site conditions above the rim, which vary site to site, will be maintained from static to upward. Pinyon and juniper grassland below the rim will be maintained as static to downward. The tables in Appendix B list past events related to pinyon and juniper grasslands below the rim causing this downward trend as a result of the Mormon and Jacket Fires. Over the next year, that trend will change to static to upward.

***Maintaining and protecting seasonal and semipermanent wetlands with emergent vegetation:***

- Exclosure fences will be built to protect the emergent vegetation and surrounding upland buffer at Deep Lake and Horse Tank, with lanes to access the stock tank water and the permittee filed water claims at both water bodies.
- Fencing protects almost all of the emergent vegetation in the semipermanent and seasonal wetlands on the Deep Lake Allotment (Deep Lake and Horse Tank). Horse Lake is currently fenced and has not been managed under any grazing allotment since the late 1980s. Exclosure fencing protects 52 acres out of 62 acres of emergent vegetation from cattle grazing at Deep Lake and all 10 acres of emergent vegetation at Horse Tank.
- The only areas affected by cattle grazing on these two wetlands will be the three separate lanes to stock tanks accessing permittee filed water claims. The 2 lanes at Deep Lake will affect 10 acres of emergent vegetation or roughly 13 percent of 72 total acres on the allotment (the lane at Horse Tank will not affect any emergent vegetation). All 3 lanes will affect a total of 32 acres of upland buffer (or 16 percent of 196 total acres).
- The fencing and protection of wetlands and their associated upland buffer is a change from past cattle grazing management. It has only been within the last 3 years that cattle grazing has not been allowed until after July 15 in seasonal and semipermanent wetlands. This decision will go further in protecting wetlands through fencing. In total, fencing will permanently protect 62 out of 72 acres of seasonal and semipermanent wetlands (83 percent) on the allotment. This is an improvement over current management which offers no permanent wetland protection via fencing. This improvement in wetland protection does not account for the existing protection of adjacent Horse Lake (61 acres).
- Alternative 4 is consistent with Forest Plan Management Area 12 direction which states "Wetlands and open water containing emergent vegetation which provide nesting habitat are protected from disturbing uses that will harass nesting birds, such as activities that are noisy or would damage nests or nesting habitat from May 1 to July 15."

***Providing new fencing for better cattle management on this allotment:***

- Five waterlots (fences) will be built around five stock tanks. These waterlots will be designed so water is accessible to wildlife, which will include a smooth bottom wire, 18 inches high, as well as wildlife jumps on all sides. The locations of these waterlots

will allow the permittee to control access to water for cattle at these stock tanks. By closing or opening up these stock tanks for cattle, the permittee can improve management of when and where cattle graze in the main pasture.

## Other Factors in My Decision

As part of selecting Alternative 4, I am incorporating the following key components in the EIS as part of my decision (see Chapters 2 and 4):

- Design Features
- Mitigation Measures
- Monitoring

### Design Features

**Annual Operating Instructions:** Annual operating instructions (AOI) make adjustments to cattle numbers and time and duration of pasture use based on current climatic and range conditions. The AOIs are established at the beginning of each grazing season (spring) and published on the Coconino National Forest Web site ([www.fs.fed.us/r3/coconino/publications](http://www.fs.fed.us/r3/coconino/publications)). Annual operating instructions may be adjusted throughout the grazing season as conditions change.

The AOI are the means by which adjustments of cattle numbers and changes of season of use are made in response to monitoring information such as frequency, canopy cover, Parker Three-Step plots, and allotment inspections. Cattle numbers may go up or down annually but will not exceed the maximum number set in this decision. The annual minimum cattle number is zero.

The AOI for Deep Lake Allotment may be changed to reflect new information based on studies, ongoing field experiences, and conclusions. If changes are suggested that fall outside the parameters of the decision resulting from this EIS, they would be subject to NEPA analysis and decision. The Forest Service would make the determination whether or not to undertake a new NEPA analysis at the time the recommendation is brought forward.

**Cattle Guards:** There is the need to keep cattle contained to the allotment and prevent forest users from leaving gates open. Where National Forest System roads are open for public use, cattle guards will be maintained. There are currently 12 cattle guards in this category. Where roads are identified for closure, in past and future road decisions, no cattle guards are necessary. If gates are left open more often, new cattle guards may need to be installed.

Cattle guard maintenance is shared between the Forest Service and the permittee for level 3 roads (main surfaced roads). Cattle guard maintenance on level 2 roads (smaller, secondary roads) is the responsibility of the permittee.

**Structural Improvements:** Cultural, wildlife, and recreation coordination will occur when implementing construction of structural improvements for the grazing system (i.e., proposed waterlots and wetland fencing).

**Utilization:** The definition of *utilization* and *seasonal utilization* come from standard protocols established by the Society of Rangeland Management and the new guidelines established by Region 3 Regional Forester (Smith et al. 2005). The definitions and procedures for utilization are further described under "Monitoring" in this record of decision and Chapter 4 of the EIS.

**Water Rights:** There are two water claims for cattle use, held by the permittee and Forest Service for Deep Lake and Horse Tank [PRD 33]. Filed water claims are part of the Lower Colorado River adjudication process and a decision on their status has not been made by the State of Arizona at this time. As part of working with the Deep Lake permittee, access to these water claims will be maintained. For the proposed enclosure fences around Deep Lake and Horse Tank, access to the water claims will be provided via lanes as described in Alternative 4.

**Fencing:** All new fencing will have a smooth bottom wire at an 18-inch height for wildlife passage. Where possible, fences will be located within tree lines to limit impacts to visual quality. Elk jumps and goat bars (PVC pipes placed on the bottom two strands and on the top strand at a crossing point) will be constructed along new fences or along existing fences on game trails and known migration corridors as volunteers and funding are available. As fence inventories are completed, those fence segments that restrict wildlife movement will be modified as funding becomes available.

**Stock Tanks:** There are no new stock tanks or removal of existing stock tanks proposed in Alternative 4. Stock tanks located within seasonal and semipermanent wetlands (Horse Tank and Deep Lake) will not be maintained for the next 10 years.

The 11 stock tanks on the allotment that are not within seasonal or semipermanent wetlands may be maintained as needed and will meet the following standards: maintenance will be limited to the original boundary of the stock tank; maintenance will be limited to removal of sediment that has accumulated in the stock tank and maintenance of the tank berm and spillway; equipment that will be used includes but is not limited to a dozer, backhoe, or front-end loader; maintenance frequency will range from no maintenance to whenever needed, depending on the amount of sediment flowing into the stock tank; maintenance will be done when the stock tanks are either dry or the water level is low enough so that the equipment will not get stuck in the mud; and any requirements or timing restrictions related to water quality, wildlife, archeology, or Forest Plan standards and guidelines will be followed.

**Salting:** No salting will be permitted in valley swales, pinyon-juniper pushes, wetlands, or within one-quarter mile from water.

**Watershed Protection:** Best management practices (BMPs) were incorporated into the project design in order to comply with Arizona State and Federal Water Quality Standards. The following BMP is designed to protect resource values, uses and maintenance of soil productivity, stability, and water quality:

- Monitor ground conditions before and during construction activities to avoid wet ground conditions that can negatively affect soil condition and water quality.

The following grazing practices were also selected to help protect soil and water quality:

- Grazing at a level that will maintain enough cover to protect the soils and maintain or improve the quantity and quality of desired vegetation.
- Fencing to improve cattle management, control access, prevent soil loss, and improve water quality.

## **Mitigation Measures**

The Forest Service will apply the following mitigation measures in order to minimize and reduce potential impacts from Alternative 4.



**Noxious Weeds:** State-listed noxious weeds located in this allotment will be treated as necessary. The procedure for inventorying and treating noxious weeds is further described under “Monitoring” in this record of decision and in Chapter 4 of the EIS.

**Sensitive Plant Species:** Sensitive plant surveys will be completed before constructing fences. If sensitive plant species are located, coordination with a wildlife biologist or botanist will occur to mitigate impacts as needed (i.e. flagging specific plants and adjusting the location of the improvement).

**Cultural Resources:** Activities associated with allotment improvements will be managed to avoid cultural resource sites and ensure no effect to cultural resources. Before initiating any activities as part of this project, a district archeologist will be notified to ensure the proposed activities have cultural resource clearance and project personnel are aware of the conditions of the Deep Lake Allotment Management Plan Cultural Resource Clearance Report [PRD 24]. Management practices that tend to concentrate cattle, such as placement of salt, haying, construction of waters or corrals, etc., will be located away from cultural resources. Ground disturbing activities, such as the construction of improvements (e.g., pipelines, stock tanks, cattle guards, etc.), will require separate archeological survey and clearance prior to implementation.

The district will periodically monitor known archeological sites to ensure they have been avoided, and such inspections will be reported in writing to the forest archeologist. Should any additional prehistoric or historic archeological sites be encountered during the course of this project, they are to be avoided and immediately reported to a district or zone archeologist. If any of these new discoveries are rock shelters, they will be closely monitored and if cattle are using these sites for shelter and impacting the fragile nature of the site, the shelter should be excluded from future grazing. Should the tribes identify any plants in the area having traditional importance, the district will encourage and protect the natural regeneration of such plants.

## Monitoring

Monitoring includes the following activities: permit compliance, allotment inspections, range readiness, forage production, rangeland utilization, condition and trend, soil condition, noxious weeds, and threatened and endangered species. Monitoring frequency varies by each activity and may be accomplished by either the permittee and/or Forest Service personnel.

**Permit Compliance:** Throughout each grazing season Forest Service personnel would monitor to determine accomplishments of the permit terms and conditions, the AMP, and the AOI.

**Allotment Inspections:** Allotment inspections are a written summary completed each fall by Forest Service personnel to document compliance monitoring and to provide an overall history of that year's grazing. This document may include weather history, the year's success, problems, improvement suggestions for the future, and a monitoring summary.

**Range Readiness:** Each spring, Forest Service personnel and/or the grazing permittee would assess range readiness prior to cattle coming on the allotment to determine if vegetative conditions are ready for cattle grazing. The range is generally ready for grazing when cool season grasses are leafed out, forbs are in bloom, and brush and aspen are leafed out. These characteristics indicate the growing season has progressed far enough to replenish root reserves so that grazing will not seriously impact these forage plants.

**Forage Production:** Production surveys for this allotment would be done every 9 to 13 years. Methods used for these surveys would use the best available methods at that time. These values would be used as tools to manage this allotment, but will not be the sole measurement to establish

carrying capacity. The most recent forage production surveys were done as part of this analysis in 1999. The next survey is scheduled to occur after 2009.

**Rangeland Utilization:** Long-term condition and trend monitoring is the primary standard for monitoring of this cattle grazing management system. Utilization is used as a tool to understand and achieve the goals of long-term management. Utilization guidelines are intended to indicate a level of use or desired stocking rates to be achieved over a period of years.

The definition of utilization and seasonal utilization come from standard protocols established by the Society of Rangeland Management and the new guidelines established by Region 3 Regional Forester (Smith et al. 2005). The following definitions and procedures for utilization were taken and adapted to fit this project.

Utilization is the proportion or degree of current year's forage production that is consumed or destroyed by animals (including insects). It is a comparison of the amount of herbage left with the amount of herbage produced during the year. Utilization is measured at the end of the growing season when the total annual production can be accounted for and the effects of grazing in the whole management unit can be assessed. Utilization guidelines are intended to indicate a level of use or desired stocking rate to be achieved over a period of years.

Utilization measurements will be taken in key areas which reflect grazing effects within an entire pasture. One key area would be established in the pasture, at existing long-term monitoring sites if possible, to represent overall pasture utilization. Utilization guidelines are not intended as inflexible limits. Utilization measurements can indicate the need for management changes prior to this need being identified through long-term monitoring. Utilization data would not be used alone, but would be used along with climate and condition/trend data, to set stocking levels and pasture rotations for future years.

Cattle would move when seasonal utilization in a pasture approaches a "moderate" level. For Alternatives 1, 3 and 4 (35 percent utilization guideline), moderate seasonal utilization would be approximately 21-50 percent. For Alternative 5 (20 percent utilization guideline), moderate seasonal utilization would be approximately 10-35 percent. Moderate seasonal utilization is an approximate value because it takes into account any additional growth which might occur later that year and considers season of use, wildlife use, weather conditions, availability of forage, and water in pastures. This moderate seasonal utilization level leaves residual cover for wildlife and soils and provides for long-term health of the grazed plants.

If monitoring shows utilization rates exceed the utilization guideline in a given year, the grazing schedule and/or cattle numbers would be adjusted the following year so the utilization guidelines are not exceeded again. If utilization is exceeded after these adjustments are made, then the grazing management system would be changed to ensure this does not happen in the future.

**Condition and Trend:** Watershed and vegetative condition and trend monitoring will help determine the effectiveness of the allotment management plan, and long-term range and watershed trends.

Parker Three-Step and paced transect monitoring points were established throughout this allotment in the 1950s - 1960s. These transects are one of the best historic records of range condition and trend. The photo points and vegetative ground cover data show how the site has changed over time. Canopy cover and frequency plots were placed with the Parker Three-Step transects in 1999 to add to this historic data.

Ocular plant canopy cover 0.10-acre plots were used to compare existing conditions with potential and desired vegetative community conditions. Over time, these plots will show how

canopy cover changes. Canopy cover will provide an indication of how plants are growing, assuming that if they are getting bigger and occupying more space, then they are doing well and can be a relative gauge of vigor.

Frequency and ground cover data were collected using the widely accepted plant frequency method (Ruyle 1997). These plots will monitor trends in plant species abundance, plant species distribution and ground cover. This will provide information on plant composition and additional information on regeneration.

These transects will be read at least every 10 years by Forest Service personnel. These plots will help determine the effectiveness of current management.

**Precipitation:** Precipitation is currently recorded at the Flagstaff National Weather Service Office at Bellemont. Precipitation data may be recorded within or near the allotments for more localized information. Precipitation data may be recorded throughout the year and summarized in the annual inspection. This data assists managers with forage utilization and production data collection.

**Soil and Riparian Condition:** The Intergovernmental Agreement between the Forest Service and the State of Arizona that controls water quality and the Clean Water Act requires implementation and effectiveness monitoring. The objectives of monitoring are to: (1) collect data sufficient to evaluate effects of management activities on soil and water resources; and (2) support changes in management activities to protect soil and water quality. Monitoring will help determine how successfully managers are implementing guidance practices and how effectively those practices are protecting soil and water quality. The current and proposed cattle grazing system incorporates best management practices (BMPs) and grazing practices (GPs) and constitutes compliance with Arizona State and Federal Water Quality Standards. Arizona Department of Water Quality (ADEQ) will continue to monitor water quality in the area.

Watershed condition can be assessed using information from the monitoring schemes above. Monitoring of plant abundance, ground cover, species diversity and estimates of overall soil condition (using the methods described throughout this monitoring section) will indicate whether or not management practices are effectively meeting management goals. Trends toward improvements in species abundance and diversity should indicate that management practices are effectively improving soil condition and by inference, maintaining or improving downstream water quality and complying with water quality standards. Conversely, decreases in plant abundance and species diversity may indicate that management practices are not effective and need to be changed. Environmental factors, especially precipitation, will be considered when evaluating monitoring results.

Condition and trend monitoring was established at the following wetlands using photo point and plant inventories in the fall of 2003: Deep Lake and Horse Lake. Horse Tank was added in 2005. Additional monitoring of these plots may occur in the next 10 years if funding is available.

Canopy cover, frequency and composition plots were established at Deep Lake, Horse Lake and Horse Tank. Additional monitoring of these plots may occur in the next 10 years if funding is available.

Residual cover monitoring will occur at Deep Lake and Horse Tank to determine the height and density of wetland vegetation: from cattle grazing after July 15 and within wetland enclosures. This monitoring would be established after the enclosures are built at Deep Lake and Horse Tank. Monitoring would occur during the waterfowl nesting season as funding is available.

**Noxious Weeds:** State-listed noxious weeds located in these allotments would be treated as necessary. The permittee and Forest Service would coordinate the weed inventory and treatment with responsibilities identified through the AOI. Noxious weed monitoring is carried out at the same time allotment inspections are conducted. As noxious weed populations are found they are mapped, monitored and in some areas, manually removed. Other treatment methods will follow guidelines established in the "Final Environmental Impact Statement for Integrated Treatment of Noxious or Invasive Weeds" (USDA 2005b).

**Threatened and Endangered Species:** Threatened and endangered species are monitored in compliance and consultation with the U.S. Fish and Wildlife Service. Vegetation monitoring points (key areas) have been established on the allotment and are monitored according to consultation requirements.

These key areas would normally be one-quarter to 1 mile from water, located on productive soils on level to intermediate slopes, and be readily accessible for grazing. Size of the key forage monitoring areas could be 20 to 500 acres. Within key forage monitoring areas, select appropriate key species to monitor average allowable use (USDA 1987, p. 66-1).

One key area plot is already established on the Deep Lake Allotment and monitored annually:

- Management Area: Meadow
- Pasture: Deep
- Location: Meadow west of 82 road
- Key Species: Blue grama, wheat grass

**My decision includes my review and determination of:**

- Consistency with the Coconino National Forest Plan (EIS, Chapter 1, "Management Direction;" PRD 7);
- Consistency with the Anderson Mesa Pronghorn Plan (EIS, Chapter 2, "Design Features");
- Consideration and integration of the Anderson Mesa Landscape Scale Assessment as applicable to the project's purpose and need statement (EIS, Chapter 1, "Proposed Action;" PRD 45).

## **Issues**

Public scoping comments on the Proposed Action were considered and analyzed during the development of the EIS [PRD 25]. Two significant issues were identified.

The first issue brought attention to the unfenced portion of Deep Lake that would remain accessible to cattle grazing on the adjoining Pickett Lake Allotment (Deep Lake spans across two different allotments). Additionally, since the time of public scoping with the original Proposed Action, new emergent vegetation was found at Horse Tank during end-of-season range inspections that reclassified Horse Tank as a seasonal wetland. This issue and new information led to the development of Alternative 4 (Two Wetland Exclosure Expansions).

The second issue was concerned with the proposed cattle numbers, 35 percent utilization level, and season of use in the Proposed Action. This issue led to the development of Alternative 5 (Reduction in Cattle Numbers, Utilization, and Season of Use).

There were no new significant issues identified during the official comment period for the EIS. Our response to public comments to the EIS is located in Appendix C.

## **Other Alternatives Considered**

In addition to the selected alternative, the Forest Service considered five other alternatives; four were analyzed in detail and one considered and eliminated from detailed study. These alternatives are summarized below. More detailed descriptions and a comparison of alternatives can be found in the EIS (Chapter 2, Tables 4, 5, 6, and 8).

### **Alternative 1 - Current Management**

Alternative 1 would authorize cattle grazing on the Deep Lake Allotment under the current grazing management system for cattle numbers and season of use. No waterlots or wetland fences would be constructed. Cattle would be herded to keep them off of Anderson Mesa prior to July 15 so that they would not graze on seasonal and semipermanent wetlands containing emergent vegetation from June 1 to July 15.

### **Alternative 2 - No Action/No Grazing**

Alternative 2 would not re-authorize cattle grazing on the Deep Lake Allotment. With no cattle use, the season of use, utilization guidelines, or adjustments to AOIs do not apply. Under this alternative, no new structural improvements would be built. Existing structural range improvements would require a separate analysis and coordination with other agencies to determine whether or not to maintain or remove these improvements.

### **Alternative 3 - Proposed Action**

This alternative is similar to Alternative 4, except no fence would be constructed around Horse Tank and only the Deep Lake Allotment side of Deep Lake was proposed for fencing. The proposed waterlots, grazing schedule, and utilization levels would be the same as described in Alternative 4.

### **Alternative 5 - Reduction in Cattle Numbers, Utilization, and Season of Use**

This alternative is similar to Alternative 4, except that cattle numbers, the utilization guideline, and the season of use would be reduced. All other actions such as wetland exclusions and waterlot fences would be the same as described in Alternative 4. This alternative was developed in response to public scoping comments which requested reduced cattle numbers, a lower utilization standard, and a shorter grazing season.

### **Alternatives Considered but Eliminated from Detailed Study**

During development of the Proposed Action and alternatives, an alternative was considered that would have fenced Deep Lake and Horse Tank wetlands without providing lanes to the stock tank waters [PRD 26]. The EIS explains the rationale for considering and eliminating this alternative from detailed study (Chapter 2).

## Public Involvement

This project was first listed in the Coconino National Forest Schedule of Proposed Actions (SOPA) on October 1, 2004. A Notice of Intent (NOI) to prepare an EIS was published in the "Federal Register" on December 28, 2004 and the Proposed Action was mailed to a list of people who expressed interest in the project or who were otherwise determined to be affected (adjacent landowners, organizations, and agencies). The NOI asked for public comment on the proposal until January 27, 2005. Five comments were received and two issues were identified during this public scoping period.

An EIS was prepared and a Notice of Availability to comment published in the "Federal Register" on March 10, 2006. The official comment period ended on April 24, 2006. Five comments were received in response to the EIS [PRD 84]. These public comments and our responses are disclosed in Appendix C.

## Findings Required by Other Laws and Regulations

This project is consistent with the following:

- Congressional intent to allow grazing on suitable lands (Multiple Use-Sustained Yield Act of 1960, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, National Forest Management Act of 1976).
- Forest Service policy on rangeland management (FSM 2202.1, FSM 2203.1, FSH 2209.13).
- Federal regulation (36 CFR 222.2 (c)) which states that National Forest System lands will be allocated for livestock grazing and allotment management plans (AMP) will be prepared consistent with land management plans.
- Authorization of livestock grazing permits for a 10-year period is required by law (FLPMA Sec. 402 (a) & (b) (3) and 36 CFR 222.3), unless there is pending disposal, or it would be devoted to other uses prior to the end of 10 years, or it would be in the best interest of sound land management to specify a shorter term.

The planning and decisionmaking process for this project was conducted in accordance with all applicable laws, regulations, policies and plans. Shown below is a partial list of Federal laws and executive orders pertaining to project-specific planning and environmental analysis on Federal lands. This project is consistent with the following:

**Clean Air Act of 1955:** Cattle grazing is not anticipated to cause disproportionate adverse human health or environmental effects to air quality (see "Air Quality" analysis in Chapter 3 of the EIS).

**Clean Water Act of 1948, as amended:** This project complies with Arizona State laws regarding natural resource protection, including but not limited to water quality [PRD 53].

**Multiple Use-Sustained Yield Act of 1960:** This project is consistent with applicable Coconino National Forest Plan standards and guidelines [PRD 7].

**National Historic Preservation Act (NHPA) of 1966, as amended:** A cultural resources clearance report has been completed for this project [PRD 24] and concludes under the Programmatic Agreement for Compliance with Section 106 of the NHPA that the project would

have no effect on cultural properties and values. Native American tribes and communities were consulted.

**National Environmental Policy Act (NEPA) of 1969, as amended:** The effects of the Proposed Action and alternatives have been analyzed and are disclosed in a document available for public review and input.

**Endangered Species Act (ESA) of 1973, as amended:** The analysis and disclosure of effects to endangered, threatened, and proposed species is complete. Consultation with USFWS for effects to threatened and endangered species within the project area was completed [PRD 64]. The USFWS concurred with the Forest Service's determination that the project may affect but will not likely adversely affect Mexican spotted owl restricted habitat [PRD 72].

**Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, as amended:** This project is consistent with applicable Coconino National Forest Plan standards and guidelines [PRD 7].

**National Forest Management Act (NFMA) of 1976, as amended:** This project complies with the Coconino National Forest Plan and associated amendments [PRD 7]. This project incorporates all applicable Forest Plan forestwide standards and guidelines and management area direction as they apply to the project area. This project is also in compliance with Forest Plan goals and objectives. All required interagency review and coordination has been accomplished.

**American Indian Religious Freedom Act of 1978:** This project will not deny American Indians access to land within the project area for traditional and cultural purposes nor will it infringe upon the rights of Native Americans to worship through ceremonies or traditional rights within the project area.

**Executive Order 13007 (Indian sacred sites):** Access to and ceremonial use of sacred sites by Indian religious practitioners will be accommodated, and activities associated with this project will avoid adversely affecting the physical integrity of such places.

**Executive Order 12898 (environmental justice):** Implementation of this project is not anticipated to cause disproportionate adverse human health or environmental effects to minority or low-income populations (see "Environmental Justice" analysis in Chapter 3 of the EIS).

**Executive Order 11990 (wetland protection):** The project area was inventoried for wetlands in 2002 and 2003 [PRD 54]. These wetlands will be managed consistent with MA 12 in the Forest Plan. This decision will protect up to 83 percent of seasonal and semipermanent wetlands (emergent vegetation) plus associated upland buffers within the project area through the construction of grazing enclosures. There is no proposed construction within wetlands (besides minimum disturbance from fence/lane construction in the upland buffer), or disposition of wetlands to other ownership, nor easement through wetlands. Stock tanks within seasonal or semipermanent wetlands (Horse Tank and Deep Lake) will be not be maintained for the next 10 years. No additional stock tanks are planned in any alternative, and there is no proposal to remove stock tanks in any alternative.

**Executive Order 13186 (migratory birds):** This project is consistent with the Migratory Bird Treaty Act of 1918, as well as Agency guidelines for conformance with the act [PRD 61]. Implementing standards and guidelines tied to MA 12 will provide opportunities to restore and enhance habitat for migratory bird species of concern in seasonal and semipermanent wetland areas.

**Forest Service Sensitive Species:** Effects to Forest Service sensitive species were considered and a biological assessment and biological evaluation has been completed for the 13 sensitive plant and wildlife species found within the Deep Lake Allotment [PRD 61]. A determination was made for each species in the EIS (Chapter 3, "Sensitive Plant and Wildlife Species").

**Management Indicator Species:** The EIS (Chapter 3, "Management Indicator Species") addressed management indicator species by linking Forest Plan management areas located within the two allotments with the management indicator species representative for that management area and habitat component (EIS, Chapter 3, Tables 18 and 19). This decision will not result in a change to forest-wide habitat or population trends, as applicable to each MIS.

## **Environmentally Preferable Alternative**

The environmentally preferable alternative is the alternative that best meets the goals of section 101 of the National Environmental Policy Act and is required by 40 CFR 1505.2(b) to be identified in a Record of Decision. "*Ordinarily, this is the alternative that causes the least damage to the biological and physical environment and best preserves and enhances historical, cultural, and natural resources*" (FSH 1909.15, Section 05).

Based on my review of the alternatives, I have identified Alternative 2 (No Action/No Grazing). Alternative 2 is environmentally preferable because it would not authorize cattle grazing or construct any of the associated range improvements (fencing, waterlots) on the Deep Lake Allotment.



# Administrative Review or Appeal Opportunities

This decision is subject to appeal in accordance with 36 CFR 215.7. The permittee has the right to appeal under either 36 CFR 215 or 251, but not both regulations. A written notice of appeal, clearly stating it is a Notice of Appeal being filed pursuant to 36 CFR 215, shall be filed within 45 days of the date of publication of legal notice of this decision in the Arizona Daily Sun, the newspaper of record. The publication date in the Arizona Daily Sun is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

Individuals or organizations that submitted comments or otherwise expressed interest before the end of the EIS comment period specified at 215.6 may appeal this decision. The notice of appeal must meet the appeal content requirements at 36 CFR 215.14. An appeal must be filed by regular mail, fax, e-mail, hand delivery, or express delivery with the appeal deciding officer. Written appeals must be submitted to:

Forest Supervisor  
Appeal Deciding Officer  
Coconino National Forest  
ATTN: Deep Lake EIS Appeal  
1824 S. Thompson Street  
Flagstaff, AZ 86001-2529

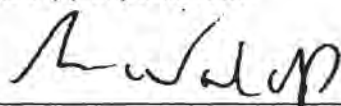
The office business hours for those submitting hand-delivered appeals are: 8:00 a.m. to 4:30 p.m. Monday through Friday, excluding holidays. Electronic comments must be submitted in a format such as an e-mail message, plain text (.txt), rich text format (.rtf), Adobe (.pdf), or Word (.doc) to [appeals-southwestern-coconino@fs.fed.us](mailto:appeals-southwestern-coconino@fs.fed.us). Appeals must have an identifiable name attached to it. Verification of identity will be required. A scanned signature may serve as verification on electronic appeals. When using the electronic mailbox, you will receive an automated reply if the message is received. If you do not receive this automated reply, it is the responsibility of the appellant to ensure the appeal is received by the deadline (36 CFR 215.15).

## Implementation

This project may be implemented 5 business days following the close of the appeal filing period established in the Notice of Decision in the Arizona Daily Sun. If an appeal is filed, implementation may begin 15 business days following a final decision on the appeal. Implementation is defined as actually doing the ground-disturbing actions described in this notice.

## Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Katherine Sánchez Meador at the Peaks Ranger District, 5075 N. Highway 89, Flagstaff, AZ 86004, (928) 526-0866.



GENE WALDRIP  
Mormon Lake District Ranger

5-22-06  
Date