

United States
Department of
Agriculture

Forest
Service

**Southwestern
Region**

MB-R3-04-1



Record of Decision for the Bar T Bar and Anderson Springs Allotment Management Plans

Mogollon Rim and Mormon Lake Ranger
Districts, Coconino National Forest, Coconino
County, AZ



Map 1 - Vicinity Map
Bar-T-Bar / Anderson Springs EIS

April 2003
 Coconino National Forest
 Mogollon Rim and Mormon Lake Ranger Districts

▲

0 25 50 75 100 Miles

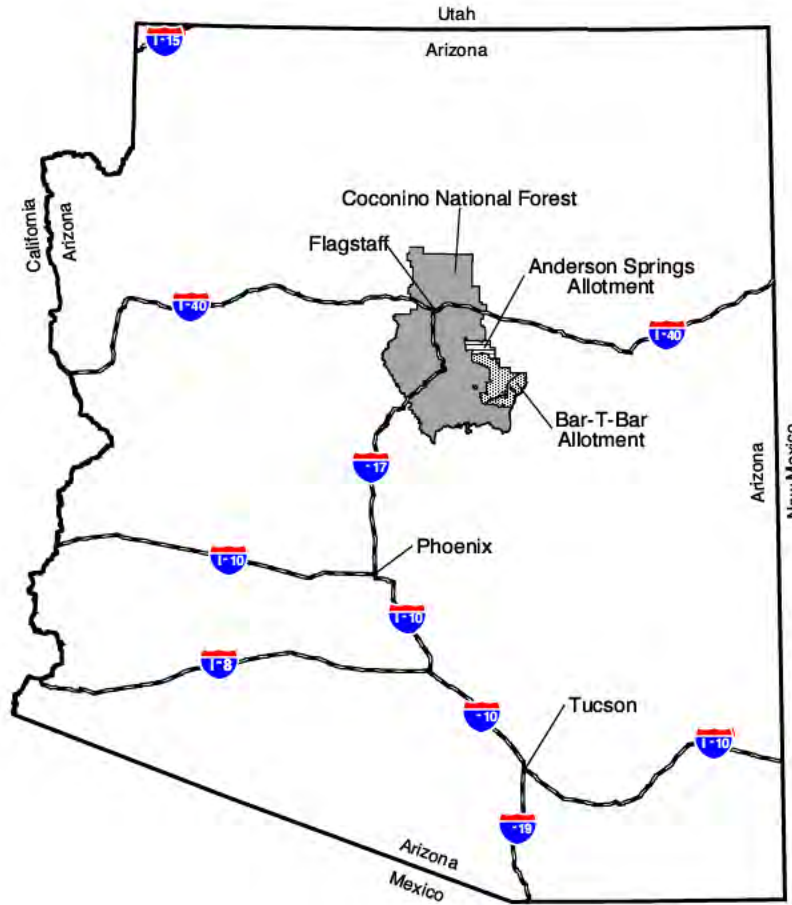


Figure 1. Vicinity map for the Bar T Bar and Anderson Springs Allotments

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for 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 USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TTY). USDA is an equal opportunity provider and employer.

Background

This record of decision documents our management decision for the Bar T Bar and Anderson Springs livestock grazing allotments. The Bar T Bar Allotment is currently permitted to the Bar T Bar Ranch, Inc., and the Anderson Springs Allotment is currently permitted to the Flying M Ranch Limited Partnership. The Bar T Bar Allotment is located on the Mogollon Rim Ranger District and the Anderson Springs Allotment is located on the Mormon Lake Ranger District of the Coconino National Forest, in Coconino County, Arizona. The entire analysis area encompasses about 237,000 acres, including private and other non-National Forest lands, of which the Bar T Bar Allotment is comprised of about 183,200 acres and the Anderson Springs Allotment is comprised of about 43,100 acres. Both allotments are located south of Flagstaff, Arizona, east of Mormon Lake, south of Interstate 40 between Twin Arrows and Winslow, and northeast of Clint's Well at the intersection of Highway 87 and FH 3 (Lake Mary Road). Please refer to Figure 1 for the project location.

Both the Bar T Bar and Anderson Springs Allotment grazing permits will be expiring. Hence, there is a need and requirement to conduct environmental analysis prior to making a decision on whether to re-issue 10-year livestock grazing permits. The purpose of this action is to authorize permitted livestock grazing on both of these allotments as appropriate in accordance with the Coconino Land and Resource Management Plan. There is a need to:

- Evaluate the effects of the Proposed Action and other action alternatives for management of the allotments on biological, social, cultural, and economic resources.
- Develop a comprehensive plan that addresses the coordination of livestock management with other resource needs on both allotments.
- Address concerns with increased canopy densities in pinyon-juniper and ponderosa pine vegetation types that are inhibiting understory plant growth and depleting soil conditions in some areas.
- Address concerns with competition for forage, in particular cool season plant species, between domestic livestock and wild ungulates resulting in decreased species diversity and poor plant vigor.
- Address the need to improve habitat conditions for pronghorn on summer and winter range adjacent to Arizona State Trust lands and private lands, where possible.
- Address concerns with livestock grazing and waterfowl nesting on wetlands that produce emergent vegetation.

A project file containing supportive and reference materials to this record of decision is available at the Mogollon Rim Ranger District office.

Decision

We have decided to implement Alternative 6 as described in the Final Environmental Impact Statement (FEIS) for the Bar T Bar and Anderson Springs Allotment Management Plans authorizing the issuance of 10-year grazing permits for both the Bar T Bar Range Allotment and the Anderson Springs Range Allotment.

We have selected Alternative 6 based upon our review of the information provided through the final environmental impact statement (FEIS), substantive comments received from the public [PR 216], review of the draft environmental impact statement (DEIS), and internal Forest Service specialists' input, (see the Project Record for all specialists reports and other supportive

information). Any and all grazing practices adopted will be further detailed in the terms and conditions of each allotment management plan (AMP), grazing permits and annual operating instructions (AOIs). Refer to Figure 6 of the FEIS for locations of proposed improvements.

More specifically, this decision will implement the actions of Alternative 6 as described in the following paragraphs.

Bar T Bar Allotment

- Issue a 10-year grazing permit for the Bar T Bar Allotment.
- Manage livestock and wildlife to achieve site-specific forage utilization levels within a range of 35 to 50 percent of annual forage production depending on the management objectives defined for the area. Management objectives refer to specific goals relative to resource area concerns. For example: forage utilization of woody vegetation in riparian areas will not exceed 20 percent. In Mexican spotted owl protected activity centers (PACs), forage utilization levels will be set at 35 percent of annual forage production. In northern goshawk post-fledging family areas (PFAs), forage utilization levels will be set at 35 percent of current forage production.
- This permit will allow up to 18,050 permitted head months under a rest-rotation/deferred rest-rotation with multiple herds over 29 pastures with forage utilization levels between 35 and 50 percent, objective driven. Objective driven is defined as the use of plant recovery and timing of grazing and rest to achieve goals of forage utilization.

Wetland Exlosures

- Construct two seasonal wetland exclosures through fencing that meets wildlife specifications; one at Melatone Lake and one at Cow Lake. The purpose of creating these seasonal wetland exclosures is to protect wetlands during the nesting season, May 1 through July 15.
- Additional protection is provided to these wetlands through year-round livestock grazing exclusion except for a lane to allow access to the stock tank at Melatone Lake from the East Melatone pasture. The rest of the Melatone Lake wetland will be excluded from livestock grazing year-round. The West Melatone pasture will not have access to the stock tank or the Melatone Lake wetland. The exclosure at Cow Lake will exclude livestock grazing year-round and will not have a lane for livestock access to the stock tank.

Reservoir Exclosure

- Construct one reservoir exclosure at Soldier Lake. This includes new fencing that will exclude livestock grazing from Soldier Lake for most of the grazing season, including May 1 through July 15. There will be an elk exclosure within this livestock exclosure. The purpose of this elk exclosure is to help differentiate between elk and livestock grazing and total exclusion of grazing.

Replacement Water Developments

- Construct two new replacement water developments in West Melatone pasture and one at North Grapevine pasture. The purpose of the new replacement water developments is to provide better distribution of water within pastures and to provide water to cattle that are

now excluded from the wetland exclusions (Melatone Lake and Cow Lake wetland exclusions).

Other Water Developments

- Construct two new upland stock tanks to improve livestock distribution, one at East Service pasture and one at Wilkins pasture.

Range Improvements

- About 4.1 miles of new 4-strand barbwire fence will be constructed as described within the following pastures:
 - David's Lake pasture. This will split David's Lake pasture and share water at Dave's Tank.
 - Moqui/Todd's pasture. Fence from Mary's pasture, south of Nina Evelyn Tank, splitting Lost Eden Tank, increasing the size of Todd's pasture.
 - Janice pasture. This is a gathering area.
 - West Green Howard pasture. This is a gathering area.
 - Lakes pasture. This will create the Soldier Lake reservoir cattle enclosure and delineate water lots.
 - Quail pasture. This fence will replace an existing electric fence.
- About 2.9 miles of new 3-strand barbwire fence will be constructed to create seasonal wetland exclusions:
 - North Grapevine pasture. This is for the wetland enclosure at Cow Lake.
 - West Melatone pasture. This is the wetland enclosure at Melatone Lake.
- About 1.6 miles of 2-wire electric fence will be constructed.
 - West/East Green Howard pasture. This fence will tie the northern portion of the pasture boundary fence to a different location on Melatone pasture fence, realigning the Green Howard pasture.
- Reconstruct about 21.8 miles of barbwire fence, removing bottom barbed wire and replacing with smooth wire to facilitate pronghorn movement and access to existing and proposed water developments.
- Remove about 3.2 miles of barbwire fence. These fences are no longer needed for management, and removal will make the area more wildlife friendly.
- Install two cattleguards. These will be located at the Melatone Lake enclosure.

Existing Improvements

- Continued management and maintenance on all real property as listed on the "Deferred Maintenance Inventory and Certification for Range Improvements" list [PRs 9 and 40].

Pinyon Pine, Juniper and Ponderosa Pine Vegetation Treatments

- About 32,677 acres of pinyon pine, juniper and ponderosa pine will be harvested and removed (FEIS, Chapter 3, "Vegetation") for grassland maintenance and restoration, of which:

- About 27,810 acres (**grassland maintenance**) of young pinyon-juniper woodland trees and young ponderosa pine trees will be removed that have encroached into historic grasslands. These areas will be in stands that have been previously treated. No cutting of alligator juniper trees will be allowed. No old-growth trees will be removed.
- About 684 acres (**grassland maintenance**) of young pinyon-juniper woodland trees and young ponderosa pine trees will be removed in transition areas within the pinyon-juniper woodland and ponderosa pine habitat type. These areas will be in stands that have been previously treated. This will maintain or improve habitat for pronghorn and other grassland species, and improve watershed conditions and forage production. No cutting of alligator juniper trees will be allowed. No old-growth trees will be removed.
- About 4,067 acres of (**grassland restoration**) young pinyon-juniper woodland trees and young ponderosa pine trees will be removed. This will remove about 60 to 80 percent of young trees to improve soil conditions and reduce existing erosion. No cutting of alligator juniper trees will be allowed. No old-growth trees will be removed.
- About 116 acres of young juniper trees will be removed for **wildlife corridors** to encourage movement of elk, deer and pronghorn between summer and winter range. No cutting of alligator juniper trees will be allowed. No old-growth trees will be removed.
- Lop and scatter slash over most of the above acreages.
- Prescribe burn on the above 32,677 acres only when soil conditions are satisfactory.

Anderson Springs Allotment

- Issue 10-year grazing permit for the Anderson Springs Allotment.
- Manage livestock and wildlife to achieve site-specific forage utilization levels within a range of 35 to 50 percent of annual forage production depending on the management objectives defined for the area. Management objectives refer to specific goals relative to resource area concerns. For example, forage utilization of woody vegetation in riparian areas will not exceed 20 percent.
- This permit will allow up to 7,042 permitted head months under a deferred rest-rotation and time-controlled grazing with two herds over 25 pastures with forage utilization levels between 35 and 50 percent, objective driven. Objective driven is defined as the use of plant recovery and timing of grazing and rest to achieve goals of forage utilization.

Wetland Enclosures

- Construction of one semipermanent wetland enclosure, through fencing that meets wildlife specifications, at Perry Lake in Perry pasture. The purpose of creating this semipermanent wetland enclosure is to protect wetlands during the nesting season, May 1 through July 15.
- Construction of five seasonal wetland enclosures at Boot Lake (North Boot pasture), Tony's Tank (West Mud Lake pasture), Pine/Camillo Lakes (West Mud Lake, East Mud Lake, West Kinnikinick pastures), Yeager Lake (North Yeager pasture), and Corner Lake (South East Pine Hill pasture). The purpose of creating these seasonal wetland enclosures is to protect wetlands during the nesting season, May 1 through July 15.

- Lanes will be constructed to allow access to stock tanks at Boot Lake, Perry Lake, Tony's Tank, Yeager Lake and Corner Lake. The remainder of these wetlands are within the year-round enclosures.
- Pine/Camillo Lakes wetland enclosure is not grazed May 1 through July 15, and is only used 1 to 5 days annually as a passthrough to move cattle through the allotment.

Replacement Water Developments

- Construct one new replacement water development. This replacement water development will be located in West Mud Lake pasture. The purpose of this new replacement water development is to provide better distribution of water within pastures and to provide water to cattle that are now excluded from the wetland enclosure (Pine/Camillo Lakes enclosure).

Other Water Developments

- Construct three new upland stock tanks to improve livestock distribution at Mud Lake West and two at Mud Lake East pastures.

Range Improvements

- About 10.6 miles of new 3-strand barbwire fence will be constructed to create seasonal and semipermanent wetland enclosures:
 - West Mud Lake, East Mud Lake and West Kinnikinick pastures. This is the wetland enclosure at Pine/Camillo Lakes which splits the above pastures.
 - North Yeager pasture. This is the wetland enclosure at Yeager Lake.
 - South Pine Hill pasture. This is the wetland enclosure at Corner Lake.
 - Perry pasture. This is the wetland enclosure at Perry Lake.
 - North Boot pasture. This is the wetland enclosure at Boot Lake.
- About 2.2 miles of 2-wire electric fence will be constructed at South Yeager pasture. This will split South Yeager pasture to improve livestock distribution and overall management.
- Reconstruct about 9.4 miles of barbwire fence, removing the bottom barbed wire and replacing it with smooth wire to facilitate pronghorn movement and access to existing and proposed water developments.
- Reconstruct seven-tenths of a mile of 2-wire electric fence to a 3-strand barbwire fence at Corner Lake wetland enclosure.
- Remove about 1.5 miles of barbwire fence. These fences are no longer needed for management, and removal will make the area more wildlife friendly.
- Install five cattleguards. These will be located at high traffic road crossings where a gate will not be practicable. There will be three cattleguards at Pine/Camillo Lake and two at Boot Lake.

Existing Improvements

- There will be continued management and maintenance on all real property as listed on the Deferred Maintenance Inventory and Certification for Range Improvements list [PR 40].

Pinyon Pine, Juniper and Ponderosa Pine Vegetation Treatments

- About 16,785 acres of pinyon pine, juniper and ponderosa pine will be harvested and removed (FEIS, Chapter 3, “Vegetation”) for grassland maintenance and restoration of which:
 - About 10,933 acres (**grassland maintenance**) of young pinyon-juniper woodland trees will be removed that have encroached into historic grasslands. No old-growth trees will be removed.
 - About 2,133 acres (**grassland maintenance**) of young pinyon-juniper woodland trees and young ponderosa pine trees will be removed in transition areas within the pinyon-juniper woodland and ponderosa pine habitat type. This will maintain or improve habitat for pronghorn and other grassland species and to improve watershed conditions and forage production.
 - About 3,623 acres (**grassland restoration**) of young pinyon-juniper woodland trees will be removed. This will remove about 80 to 90 percent of young trees to increase habitat for pronghorn and other grassland species and improve watershed conditions and forage production.
 - About 96 acres of young juniper trees will be removed for **wildlife corridors** to encourage movement of elk, deer and pronghorn between summer and winter range. No cutting of alligator juniper trees will be allowed. No old-growth trees will be removed.
 - Lop and scatter slash over most of the above acreages.
 - Prescribe burn on the above 16,785 acres only when soil conditions are satisfactory.

Monitoring

This decision adopts the monitoring plan found in Chapter 4 of the FEIS which specifies the monitoring activities required during and after implementation. This decision also incorporates the monitoring requirements as written in the “Arizona Wildlife Federation Settlement Agreement” [PR 228A]. The purpose of monitoring and evaluation is to inform the responsible official, the staff, and interested public of progress toward the goals and objectives during the accomplishment of projects.

- Establishment of a wetland monitoring study plot at Cow Lake on the Bar T Bar Allotment as discussed in the FEIS Chapter 4. This monitoring plot will be a 12 foot by 40 foot elk enclosure located within the livestock enclosure. Data will be collected on this site and existing sites at Corner Lake and Yeager Lake. This will include plant canopy cover, composition and frequency data as well as photo point data.
- Establishment of two monitoring study plots on the Bar T Bar Allotment. These monitoring study plots will compare the effects of grazing by all ungulates, grazing by wild ungulates, and no ungulate grazing on plant composition and cover. There are three existing monitoring study plots on the Anderson Springs Allotment that will continue to be monitored as discussed in the FEIS Chapter 4 [PR 161].
- Monitoring to determine whether best management practices (BMPs) identified as mitigation measures in Table 3 of the FEIS are being followed. This will include the following:

- BMP 1 (SW3) – Monitor ground conditions before and during construction activities to avoid wet ground conditions that can adversely affect soil condition and water quality.
 - BMP 2 (SW4) – Monitor effective ground cover before and after vegetation treatments using Daubenmire plots.
 - BMP 3 (SW5) – Monitor the closure of temporary roads for effective vegetative ground cover through onsite inspections during and after vegetation treatments.
 - BMP 4 (SW6) – Monitor prescribed burning plans so that burning does not occur on soils that are currently rated as impaired. This will be done during project layout.
 - BMP 5 (SW7) – Monitor project areas that contain non-riparian stream courses for buffers through onsite inspections.
 - BMP 6 (SW8) – Monitor prescribed burning prescriptions to ensure that soil temperatures are minimized during prescribed burning.
 - BMP 7 (SW10) - Monitor identified non-maintained stock tanks in wetlands for impacts to soil, vegetation and water quality from grazing animals.
- Recommendations in the “Anderson Mesa Pronghorn Herd Operational Plan,” dated July 1, 2002 will be implemented where funding and habitat conditions allow [PR 161]. The details will be decided during the Annual Pronghorn Working Group meeting.
 - Range monitoring will continue to occur on both allotments which includes:
 - Forage production
 - Range administration, including compliance monitoring
 - Allotment inspections
 - Range readiness
 - Forage utilization
 - Condition and trend
 - Forage utilization data collection in Mexican spotted owl habitat and northern goshawk PFAs
 - Monitor established sites within East Clear Creek and collect long-term datasets for trend information relative to fish population viability and habitat parameters. This monitoring will be continued for the Little Colorado spinedace and other native fish.
 - Monitor potential Southwestern willow flycatcher habitat in East Clear Creek for suitability. When suitability is reached, conduct flycatcher surveys to determine occupancy.
 - Conduct archaeological surveys and clearances for all ground-disturbing activities prior to implementation. Monitor avoidance of existing archaeological resources [PR 55].

Mitigation

This decision adopts the mitigation measures disclosed in the FEIS, Chapter 2, Table 3 - Mitigation Measures. These mitigation measures incorporate best management practices (BMPs) [PR 4A] and constitute compliance with Arizona State and Federal Water Quality Standards. These measures are designed to protect resource values, uses, and maintenance of soil productivity, stability and water quality.

These mitigation measures include actions to reduce potential impacts to soil and water, vegetation, range, human environment, visual quality, resource access, fire, fuels, smoke management, wildlife, fisheries, noxious weeds, rare plants and seeding.

Rationale for Decision

We have selected Alternative 6 because it best meets the project's purpose and need as stated on page 3 of this document. Alternative 6 modifies current management of natural resources and land use to protect long-term health, productivity of soil, vegetation and wildlife habitat while continuing to permit livestock grazing in accordance with the "Coconino National Forest Land Management Plan" [PR 4]. Alternative 6 addresses the environmental issues concerning pronghorn through vegetative treatments that maintain and restore grasslands, and fence modification and placement that facilitates movement between winter and summer range and provides access to water. Vegetative treatments would also reverse the current trends of declining understory vegetation, degrading soils, and loss of plant species diversity and vigor. This alternative provides the best balance of the environmental and economic issues of seasonal and semi-permanent wetland habitats and water-dependent species by excluding livestock from 97 percent of all seasonal and semipermanent wetlands while providing lanes to water tanks where other options are not feasible. This decision summaries the details that are found in Table 4 of the FEIS.

We believe that an action alternative that permits domestic livestock grazing in accordance with the Coconino National Forest Plan direction, standard and guidelines, at some level, is preferable to "no grazing" (Alternative 2) as long as other issues and concerns are mitigated. Alternative 2 (no grazing) does not meet the purpose and need of the project since it does not address:

- Concerns with increased canopy densities in pinyon-juniper and ponderosa pine vegetation types that are inhibiting understory plant growth and depleting soil conditions in some areas;
- Concerns with competition for forage, in particular cool season plant species, between domestic livestock and wild ungulates resulting in decreased species diversity and poor plant vigor; or
- The need to improve habitat conditions for pronghorn on summer and winter range adjacent to Arizona State Trust lands and private lands.

Alternative 1 (current management) does not meet the purpose and need of addressing the increased canopy densities in pinyon-juniper and ponderosa pine vegetation types that are inhibiting understory plant growth and depleting soil conditions in some areas. Alternative 1 does not address the concerns regarding pronghorn habitat conditions on summer and winter range. Whereas, Alternative 6 does address these issues by including 49,462 acres of pinyon pine, juniper and ponderosa pine harvest and removal. These vegetative treatments will benefit pronghorn movement, have a positive effect on the establishment of understory forbs and cool season grasses, and will improve soil conditions.

Alternative 1 also does not adequately address issues regarding wetlands and pronghorn habitat improvement. No monitoring plots are planned under Alternative 1 for wetland monitoring nor for ungulate grazing. Monitoring will help us understand the effects of various grazing scenarios on plant cover, composition, and frequency, and how these can change over time. Without monitoring it will be difficult to determine future course of actions or adaptive management strategies and how pronghorn habitat is affected over time.

Alternative 3 has the greatest number of miles of new fence construction which research has shown may have detrimental effects on pronghorn movement. Alternative 6 proposes 22.3 fewer miles of new fence construction than Alternative 3 and has the fewest of all the action alternatives. Alternative 6 has the most miles of fence removal proposed of all the action alternatives except for Alternative 7. The lower number of miles of fence in Alternative 6 is a benefit over the others because of fewer effects to pronghorn movement and less economic impact to the permittee and Forest Service.

Alternative 6 also helps maintain the economic viability of the permittees by proposing greater numbers of permitted livestock than in Alternative 4. Alternative 6 proposes allowing up to 18,050 permitted head months on the Bar T Bar Allotment and allowing up to 7,042 permitted head months on the Anderson Springs Allotment while Alternative 4 allows 13,537 permitted head months and 5,282 permitted head months respectively. Alternative 6 permitted head months for both the Bar T Bar and Anderson Springs Allotments are the same as Alternatives 1, 3, 5 and 7.

Alternative 6 proposes fewer replacement water developments than Alternative 7 resulting in lower implementation costs. While Alternative 7 protects wetlands by constructing fence enclosures, we feel this alternative will incur excessive costs by constructing 14 replacement water developments (see Table 1) in recognition of valid water rights and claims by permittees if all cattle use is excluded from wetlands. Alternative 6 will not have these costs because livestock access lanes to stock tanks will be constructed along with the construction of three replacement water developments.

Alternative 6 provides the best balance of wetland protection, improvements in pronghorn habitat, improvements in understory plants and soil conditions, and maintains economic viability for the permittees compared to the other action alternatives.

Wetland and Waterfowl Habitat Protection

Alternative 6 provides protection to seasonal and semipermanent wetlands that have the potential for producing emergent vegetation from livestock grazing from May 1 to July 15 as stated in the "Coconino National Forest Land Management Plan," page 173 [PR 4], either through grazing schedules (Wallace Lake) or through construction of eight new wetland enclosures.

Even though 9 wetland acres out of 747 total seasonal and semipermanent wetland acres within the analysis area are not protected during this timeframe, we feel that this meets the standards and guidelines in the Coconino Forest Plan. An additional 11 acres of seasonal wetlands at Corral Tank will be subject to grazing May 1 to July 15, however, this site does not have nesting habitat potential and is not subject to this Forest Plan standard and guideline [PR 244 and 268]. This equates to a 3 percent impact on all seasonal and semipermanent wetland acres, and just over 1 percent of seasonal and semipermanent wetland acres that have nesting habitat potential.

Alternative 6 creates six new wetland enclosures with access lanes to stock tanks on the Anderson Springs Allotment. The seasonal and semipermanent wetland area protection fences will be built around Perry Lake, Boot Lake, Corner Lake, Yeager Lake, Tony's Tank and Pine/Camillo Lakes wetlands with lanes constructed to limit access to stock tanks only. The only cattle grazing that will occur will be as a passthrough at Pine/Camillo Lakes. The fences are built with upland buffers around the seasonal and semipermanent wetland site and total about 1,200 acres. On the Bar T Bar Allotment, there are 2 new seasonal wetland area protection fences built around Melatone Lake and Cow Lake, totaling about 500 acres, with a grazing access lane to the stock tank adjacent to Melatone Lake.

Alternative 6 does not propose to remove stock tanks within wetland sites. We realize that stock tanks do have an effect on wetland function in three ways: (1) altering biomass/vegetation through grazing; (2) causing erosion; and (3) riparian extent is decreased over time [PR 199]. After reviewing aerial photos that were available on the Coconino National Forest from selected years 1948 through 1998, it was not apparent that wetted area perimeters within wetlands (wetlands that do not have natural outlets) had changed over time [PRs 199 and 267]. Thus, the key component to managing wetlands with stock tanks is to manage the biomass within the wetland site. We realize that with stock tanks, these selected wetland sites will not function at their full potential, but still will maintain proper functioning condition. There are no effects from the stock ponds on years when there is adequate water to cover the wetland to depth.

We also realize that there is some effect on wetland sites from stock ponds to wetland capacity [PRs 199 and 205]. On marginal precipitation years, the effects of stock ponds are minimal. The amount of water on marginal years would not get to sufficient depth or cover a significant portion of the wetland to be able to produce abundant emergent vegetation in the growing season before the water onsite would evaporate/transpire. We realize that even with years of marginal precipitation, the potential for inundation in an unaltered site is still minimal due to low water depths and evaporation rates. On wet years, there is sufficient water available to cover the entire wetland, and stock pond effects on capacity do not occur.

Even though Alternative 6 does not remove stock tanks from within wetland exclosures, wetland vegetation and function will be managed to achieve proper functioning condition (PFC) within 97 percent of wetland and riparian acres by virtue of the wetland exclosures at seasonal and semipermanent wetland sites.

There are adverse impacts from livestock grazing on 9 acres of lanes to stock tanks within seasonal and semipermanent wetlands. These adverse effects include impacts to soil conditions, decreased nutrient cycling, disturbance to waterfowl potential nesting sites between May 1 and July 15 through trampling, and minimizing nesting habitat potential within these lanes.

Overall, we believe that the livestock grazing restriction on 727 acres of seasonal and semipermanent wetland acres, with the potential for producing emergent vegetation, will improve soil conditions, maintain or improve functionality of the seasonal and semipermanent wetland sites, and provide adequate undisturbed waterfowl nesting sites and waterfowl nesting habitat. This is in compliance with, and goes beyond applicable Forest Plan standards and guidelines for Management Area 12 by providing year-round protection during the fall migratory bird season at Boot Lake, Perry Lake, Corner Lake, Tony's Tank, Yeager Lake and Melatone Lake wetlands outside of the lanes, and all of Cow Lake [PR 10]. This alternative also provides increased protection at Pine/Camillo Lakes through only a very short-term graze (1 to 5 days per annum) as a passthrough after July 15. The exception to this will be the lanes and stock tanks themselves. All wetland sites will maintain proper functioning condition and as such the direction of Executive Order 11990 (Wetland Protection) is being met under Alternative 6 [PR 224].

Alternative 6 was created to improve management of wetland resources across the analysis area. From comments to the DEIS from the Arizona Wildlife Federation and Northern Arizona Audubon Society, we understood that the concept of large wetland exclosure areas for seasonal and semipermanent wetlands were desirable [PR 216]. We used this information to help us craft both Alternative 6 and Alternative 7.

Alternative 6 allows for some use of pastures which contain seasonal and semipermanent wetlands during May 1 through July 15 while Alternatives 1, 3, 4, and 5 do not include this use. Excluding the use is an impact on livestock numbers that we feel is not necessary with the design

of the wetland enclosures and alternative waters in Alternative 6. Alternative 7 does allow use of the pastures but there is a subsequent impact to permittees because of the need to construct 14 replacement water developments in light of valid water rights and claims by permittees.

Water Rights/Claims

We believe that Alternative 6 provides resource protection while allowing a livestock operation to function and addresses existing valid water rights and claims. The use of lanes to stock tanks within and/or adjacent to wetland sites maintains these water rights and claims. The exception to this would be Cow Lake where the water rights will be severed and transferred to a new tank site outside the wetland area. We explored the option of having no lanes in Alternative 7, however, the implementation of Alternative 7 would be cost prohibitive due to the additional costs of developments such as stock tanks, guzzlers, well and storage tanks, water drinkers, and many miles of water system pipeline.

Water rights are claimed by the permittees and Forest Service at every stock pond within seasonal and semipermanent wetlands (Refer to Table 18, FEIS). Two valid existing water rights occur at Perry Lake, belonging to the Flying M Land Limited Partnership. The remaining water claims are by the livestock grazing permittees (and in some cases such as Boot and Wallace Lakes, there are claims by multiple permittees) and the Forest Service. The Little Colorado River Water Rights Adjudication will provide for final decrees of the claims into valid water rights. In the meantime, we will treat all claims (both Federal and permittees') as equivalent to valid water rights.

While Alternative 7 allows use of the pastures between May 1 and July 15, it requires the construction of 11 additional replacement waters over Alternative 6. Developing replacement waters may not protect the permittees' water rights and claims. Because Alternative 6 allows use of the existing waters, we feel Alternative 6 is more responsive to the issue regarding the permittees' water rights and claims by providing access lanes to stock tanks that have valid water rights and claims than the other alternatives.

We feel Alternative 6 best balances the needs of wetland protection and nesting requirements with permittees water rights and claims by the construction of lanes to stock tanks and replacement water developments.

Management Indicator Species

Implementation of Alternative 6 would have no effect on forest-wide habitat or population trends for nine management indicator species, including Abert squirrel, northern goshawk, Mexican spotted owl, pygmy nuthatch, hairy woodpecker, red squirrel, red-naped sapsucker, juniper titmouse or Lincoln's sparrow. Indicator habitats for these species are present in the project area, but would not be affected by project actions.

Project actions for Alternative 6 would affect indicator habitat or populations for six management indicator species, including turkey, elk, mule deer, pronghorn, cinnamon teal and macroinvertebrates. Forest-wide habitat and population trends for two of these species are currently stable (elk and macroinvertebrates). Project effects would not change these stable habitat and population trends.

The forest-wide habitat trend is also currently stable for cinnamon teal, although habitat is considered below potential. Improvements in habitat due to project actions are expected to change the habitat trend to increasing for this species. Improvements in habitat would also contribute positively to population trend, which is considered "inconclusive" on the forest. The

intermittent nature of the wetlands due to dry and wet periods, along with research that used different methods, have made it difficult to define population trend over the past 18 years.

The current forest-wide habitat trend is considered declining for turkeys, which exhibit a stable population trend. Project actions may have minor impacts to the herbaceous understory, but would not change forest-wide habitat or population trends.

Mule deer and pronghorn exhibit declining forest-wide population trends. The current forest-wide habitat trend for pronghorn is considered stable to declining, while the current trend for mule deer is slightly declining. Project actions would result in improvements in habitat for both species, changing forest-wide habitat trends to stable. These improvements are not expected to alter the declining forest-wide population trend for mule deer. Improvements in pronghorn habitat would be more substantive, but we cannot conclude whether they would result in changing the declining forest-wide population trend.

Other Issues Addressed

Alternative 6 also addresses the environmental and economic issues that were identified through scoping. One issue concerned improvements that would benefit the pronghorn and its habitat. Alternative 6 addresses this issue through the harvesting of about 49,462 acres of pinyon pine, juniper and ponderosa pine that have encroached onto historic grasslands and pronghorn habitat. Slash will remain onsite from these harvested acres and will provide microsites for regeneration and establishment of nutritious forbs, greater visibility for pronghorn and increased forage production over about 7,000 to 22,000 acres. Alternative 6 will reconstruct 31.2 miles of fence to wildlife specifications. This will include a smooth bottom wire at least 18 inches above the ground, and a maximum 38 to 42 inch high top wire. Existing fences will be reconstructed to wildlife specifications as funding allows. Alternative 6 will also remove a total of 4.7 miles of fence to better facilitate pronghorn movement and access to existing and proposed waters.

The DEIS also identified environmental issues over seasonal and semipermanent wetland habitats and water-dependent species. Alternative 6 addresses those issues through the creation of eight new wetland exclosures as discussed earlier in this document. This alternative protects all seasonal and semipermanent wetlands that have the potential for producing emergent vegetation from livestock grazing from May 1 to July 15. Alternative 6 will create three new monitoring study plots. Together with the five existing monitoring study plots, these areas will provide information for better management of pronghorn and wetland habitats.

Economic Viability of Ranches

Comments on the DEIS from the permittees on the Preferred Alternative (Alternative 5 - DEIS) stated that the restriction of the use of many pastures through timing restriction to meet Forest Plan Standards and Guidelines for nesting habitat would affect the economic viability by negatively affecting the forage resource through repeated entry into the same pastures year after year. Alternative 6 addresses this concern by allowing for increased flexibility in management by allowing use of pastures around wetland exclosures without the restrictive timing requirement [PR 152]. Alternative 6 satisfies the rangeland management objective of maintaining economically feasible ranching operations.

Environmentally Preferred Alternative

The environmentally preferred alternative is the alternative that best meets the goals of Section 101 of the National Environmental Policy Act and 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.

Alternative 5 was identified as the Preferred Alternative in the DEIS. However, based on comments received on the DEIS, it was felt that additional alternatives needed to be developed to address the additional concerns. This resulted in development of Alternatives 6 and 7.

When considering the entire woodland and grassland ecosystem, Alternative 7 would be the environmentally preferred alternative because 100 percent of the seasonal and semipermanent wetlands that have potential to produce emergent vegetation would be protected. However, implementation of Alternative 7 would be cost prohibitive due to developments such as stock tanks, guzzlers, well and storage tanks, water drinkers, and many miles of water system pipeline.

We find the actions in Alternative 6 to be the most appropriate management at this time. This alternative provides resource protection while allowing a livestock operation to function in accordance with the multiple-use concept inherent in the goals, objectives, standards, and guidelines of the “Coconino National Forest Land Management Plan.” It responds best to the issues and concerns of all those who are interested or affected by the activities to be implemented, maintains permittees’ water rights/claims, provides greater flexibility in the timing of grazing within pastures that contain wetlands while complying with the Coconino National Forest Plan standards and guidelines for wetland protection and is economically practical. We believe that Alternative 6 moves the allotments toward the desired condition in Management Area 12, protects long-term health and productivity of soil, vegetation and wildlife habitat (MIS) and meets all requirements under applicable laws, regulations and policies.

Other Alternatives Considered

In addition to the **FEIS Preferred Alternative (Alternative 6)**, see page 1 of the ROD), we considered 10 other alternatives. Six other alternatives were analyzed in detail and four alternatives were considered but eliminated from detailed study. The six alternatives analyzed in detail included the no action alternative (no grazing) and a current management alternative. A more detailed comparison of these alternatives can be found in the FEIS, Chapter 2, “Alternatives.”

Summary of Alternatives

The six additional alternatives analyzed in detail exhibit a wide range of actions for the management of livestock on both allotments. Table 1 summarizes the specific actions proposed for each alternative.

Alternative 1 – Current Management

Under Alternative 1, current management plans would continue to guide management of the allotments. The current livestock grazing strategy would continue on both allotments over the next 10 years. New 10-year term grazing permits would be issued for both allotments, and new allotment management plans (AMPs) would be written.

Alternative 2 – No Action, No Grazing

Under the no action alternative, no livestock grazing would be permitted on the Bar T Bar or Anderson Springs Allotments for the next 10 years. All livestock would be removed. No term grazing permits would be issued. There would be no associated grazing activities such as

maintenance of structural improvement for fences and water developments, though some monitoring may take place, especially for elk use and general utilization rates of wildlife.

Alternative 3 – Proposed Action

Alternative 3 originated from a proposal developed by the “Diablo Trust titled Diablo Trust Area Range Management Plan and Proposed Action” [PR 15]. Since their proposed action did not include site specificity as is required by the Council on Environmental Quality (CEQ)—which are the regulations for implementing NEPA—the Forest Service interdisciplinary team took their proposed action and added site specificity to it. This alternative specifies vegetation treatment types and locations, structural range improvement types and location, and provides site specificity to the proposed action. Some concerns with riparian and wetland area management were also addressed in this alternative.

Alternative 4 – Rest Rotation with Less Fencing than the Proposed Action

Alternative 4 was developed to address concerns with the proposed action. Some members of the public were concerned that the proposed action would result in the further decline of pronghorn and could contribute to their eventual extirpation in the analysis area. Specifically, livestock grazing was thought by members of the public to be reducing hiding cover, altering plant species composition, encouraging invasion of woody species into grasslands, and reducing quality and quantity of forage for pronghorn.

These concerns are addressed in this alternative through reduction of proposed livestock numbers, lower allowable forage utilization levels, changes in grazing systems, and extensive vegetation treatments to reduce woody plant invasion into grasslands.

Alternative 5 – Moderate Fencing, DEIS Preferred Alternative

This alternative was developed to address issues regarding the extensive fencing proposed in the proposed action, while at the same time maintaining economic viability for the permittees. Alternative 5 essentially duplicates most features of Alternative 3 but proposes fewer miles of fence construction.

Alternative 7 – No Lanes, Wetlands Protection

This alternative was developed in response to comments from the Arizona Wildlife Federation and the Northern Arizona Audubon Society. This alternative addressed issues regarding the complete protection of all wetlands and not providing any livestock grazing within wetlands. The alternative is designed to protect seasonal and semipermanent wetlands and provide greater flexibility in the timing of grazing within pastures that contain wetlands. The grazing system employed is the same as Alternative 5 (rest-rotation/deferred-rotation with multiple herds on Bar T Bar Allotment and deferred rest rotation and time controlled grazing with two herds on the Anderson Springs Allotment).

Table 1. Comparison of Alternatives ¹

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Rest-rotation with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
General Planning							
Forest Plan Amendment Needed?	No	No	No	No	No	No	No
Meets Purpose and Need?	Yes	No	Yes	Yes	Yes	Yes	Yes
Grazing System							
Bar T Bar	Rest-rotation/Deferred-rotation with Multiple Herds	No Grazing	Rest-rotation/Deferred-rotation with Multiple Herds	Rest-rotation/Deferred-rotation with Multiple Herds	Rest-rotation/Deferred-rotation With Multiple Herds	Rest-rotation/Deferred-rotation With Multiple Herds	Rest-rotation/Deferred-rotation with Multiple Herds
Permitted Head Months	Up to 18,050	0	Up to 18,050	Up to 13, 537	Up to 18,050	Up to 18,050	Up to 18,050
Anderson Springs	Deferred Rest-rotation and Time-controlled Grazing with Two Herds	No Grazing	Deferred Rest-rotation and Time-controlled Grazing with Two Herds	Rest-rotation with Two Herds	Deferred Rest-rotation and Time-controlled Grazing with Two Herds	Deferred Rest-rotation and Time-controlled Grazing with Two Herds	Deferred Rest-rotation and Time-controlled Grazing with Two Herds
Permitted Head Months	Up 7,042	0	Up to 7,042	Up to 5,282	Up to 7,042	Up to 7,042	Up to 7,042
Pastures and Enclosures							
Number of Pastures - Bar T Bar	29	No Grazing	34	31	31	29	29
Number of Pastures - Anderson Springs	24	No Grazing	30	24	25	25	25

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Restoration with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
New Wetland Enclosures							
Bar T Bar	None	None	Soldier Lake (reservoir)	Soldier Lake (reservoir)	Soldier Lake (reservoir)	Cow Lake, Melatone Lake, Soldier Lake (reservoir)	Cow Lake, Melatone Lake, Soldier Lake (reservoir)
Anderson Springs	None	None	None	None	None	Pine Lake/ Camillo Lake, Yeager, Corner, Perry and Boot Lake, Tony's Tank	Pine Lake/ Camillo Lake, Yeager, Corner, Perry and Boot Lake, Tony's Tank
Lanes to Wetlands							
Bar T Bar	No lane construction	No lane construction	No lane construction	No lane construction	No lane construction	Lane to Melatone Lake	No lane construction
Anderson Springs	No lane construction	No lane construction	No lane construction	No lane construction	No lane construction	Lanes to Perry, Yeager, Corner, and Boot Lake, Tony's Tank	No lane construction
Timing of use in semi-permanent and seasonal wetlands (including proposed key area wetland enclosures)	No grazing from May 1- July 15; managed through grazing schedules	No grazing from May 1- July 15	No grazing from May 1- July 15; managed through grazing schedules	No grazing from May 1- July 15; managed through grazing schedules	No grazing from May 1- July 15; managed through grazing schedules	Camillo/ Pine passthrough for up to 5 days after July 15. No grazing year-round at Cow Lake. Exception at lanes: Perry Lake Boot Lake Tony's Tank Corner Lake Yeager Lake	No grazing in enclosures yearlong on all wetlands, Wallace Lake is not grazed May 1 to July 15 through grazing schedules. Corral Tank can be grazed May 1-July 15

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Rest-rotation with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
						<p>Melatone Lake.</p> <p>Corral can be grazed May 1-July 15 because no potential nesting habitat.</p> <p>Wallace Lake is not grazed May 1 to July 15 through grazing schedules.</p> <p>Mud Lake is a reservoir, but would not be grazed until after July 15.</p>	<p>because it contains no potential nesting habitat</p> <p>Mud Lake is a reservoir, but would not be grazed until after July 15.</p>
Forage Utilization Levels (%)							
MSO Protected Activity Centers (PACs)	35	No Grazing	35	25	35	35	35
MSO Restricted Habitat	35	No Grazing	35	25	35	35	35
NGO Post Fledging Family Areas (PFAs)	35	No Grazing	35	25	35	35	35
Riparian (woody species)	20	No Grazing	20	20	20	20	20

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Restoration with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
Other Forested and Woodland Types	40-50	No Grazing	35% on impaired/unsatisfactory soils, 50% on satisfactory soils	25	35% on impaired/unsatisfactory soils, 50% on satisfactory soils	35% on impaired/unsatisfactory soils, 50% on satisfactory soils	35% on impaired/unsatisfactory soils, 50% on satisfactory soils
Bar T Bar Averages	40	No Grazing	35% - 50% objective driven ²	25	35% - 50% objective driven	35% - 50% objective driven	35% - 50% objective driven
Anderson Springs	50	No Grazing	35% - 50% objective driven	25	35% - 50% objective driven	35% - 50% objective driven	35% - 50% objective driven
Range Improvements – Fence (miles)							
Total New Fence Construction (miles)	0	0	43.7	21.6	23.4	21.4	22.9
2-Wire Electric (miles)							
New	0	0	16.5	10.9	13.1	3.8	3.8
3-Wire Electric (miles)							
New	0	0	16.5	0	0	0	0
3-Strand Barbwire (miles)							
New	0	0	0	0	0	13.5	15
4-Strand Barbwire around private land (miles)							
New	0	0	5.6	5.6	5.6	0	0
4-Strand Barbwire-other	0	0	5.1	5.1	4.7	4.1	4.1
Total Reconstruction (miles to meet wildlife standards)	0	0	31.9	31.9	31.9	31.9	32.7
Fence Removed (miles)	0	0	2.8	2.8	2.8	4.7	6.9

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Restoration with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
Water Developments							
Proposed New Water Development	0	0	5 stock tanks	5 stock tanks	5 stock tanks	8 stock tanks	19 (9 stock tanks, 1 guzzler, 1 well with storage tank, 8 drinkers with storage tanks + 16.3-mile pipeline system)
Replacement Water Development (subset of total new waters)	N/A	N/A	N/A	N/A	N/A	3 Replacement Water Development (stock tanks)	14 (4 stock tanks, 1 guzzler, 1 well with storage tank, 8 drinkers with storage tanks + 16.3-mile pipeline system)
Stock Tank Maintenance in wetlands	Yes	No	No	No	No	Yes Maintain tanks with lanes plus temporary/ephemeral wetlands.	No Maintain tanks in seasonal and semi-permanent wetlands Yes Maintain tanks in temporary/ephemeral wetlands.
Stock Tank Maintenance outside of wetlands	0	0	19	19	19	19	19

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Restoration with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
Repair trick tank	0	0	0	0	1	1	1
Grazing Strategy needed until improvements in place	N/A	N/A	N/A	N/A	N/A	Implement Alternative 5 until fences are constructed.	Implement Alternative 5 until fences are constructed.
Total wetland enclosure acres (existing and proposed)	6,009	6,009	6,042	6,042	6,042	7,747	8,330
Existing Wetland Enclosure Acres (with upland buffers)	6,009 (Hay Lake and Kinnikinick)	6,009 (Hay Lake and Kinnikinick)	6,009 (Hay Lake and Kinnikinick)	6,009 (Hay Lake and Kinnikinick)	6,009 (Hay Lake and Kinnikinick)	6,009 (Hay Lake and Kinnikinick)	6,009 (Hay Lake and Kinnikinick)
New Reservoir Enclosures			33 acres Soldier Lake	33 acres Soldier Lake	33 acres Soldier Lake	33 acres Soldier Lake	33 acres Soldier Lake
Total Proposed Wetland Enclosures in seasonal and semi-permanent wetlands (with upland buffers)						1,705 (Boot Lake, Corner Lake, Yeager Lake, Perry Lake, Melatone Lake, Cow Lakes, Tony's Tank)	2,288 (Boot Lake, Corner Lake, Yeager Lake, Perry Lake, Melatone Lake, Cow Lakes, Tony's Tank)
Seasonal and semi-permanent wetland acres excluded from grazing	747 (100%)	747 (100%)	747 (100%)	747 (100%)	747 (100%)	727 (97%)	747 (100%)

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Restoration with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
May 1 to July 15							
New Cattleguards	0	0	3	1	1	7	11
Pinyon Pine, Juniper and Ponderosa Pine Vegetation Treatments							
Bar T Bar							
Grassland Maintenance in Pinyon-juniper	0	0	27,810	27,810	27,810	27,810	27,810
Grassland Restoration in Pinyon-juniper	0	0	4,067	4,067	4,067	4,067	4,067
Grassland Maintenance in Transition Areas	0	0	684	684	684	684	684
Wildlife Corridors	0	0	116	116	116	116	116
Acres Treated	0	0	32,677	32,677	32,677	32,677	32,677
Anderson Springs							
Grassland Maintenance in Pinyon-juniper	0	0	10,933	10,933	10,933	10,933	10,933
Grassland Maintenance in Ponderosa Pine & Pinyon-juniper	0	0	2,133	2,133	2,133	2,133	2,133
Grassland Restoration in Pinyon-juniper	0	0	3,623	3,623	3,623	3,623	3,623
Wildlife Corridors	0	0	96	96	96	96	96

Alternatives							
Comparison Features	1 Current Mgmt.	2 No Grazing No Action	3 Proposed Action	4 Rest-rotation with Least Fencing (Less Than Proposed Action)	5 Moderate Fencing DEIS Preferred Alternative	6 Lane Access, Wetlands Protection FEIS Preferred Alternative	7 No Lanes, Wetlands Protection
Acres Treated	0	0	16,785	16,785	16,785	16,785	16,785
Total Acres Treated	0	0	49,462	49,462	49,462	49,462	49,462
New Monitoring Study Plots							
Monitoring Study Plots	0	0	0	2	2	2	2
Wetland Study Plots	0	0	0	1	1	1	1

¹ Table 1 displays a summary of actions proposed in the final environmental impact statement (FEIS) for the Bar T Bar and Anderson Springs Allotments.

² Objective driven is defined as the use of plant recovery and timing of grazing and rest to achieve goals, rather than setting utilization limits.

Alternatives Considered but Eliminated from Detailed Study

Diablo Trust Area Range Management Plan and Proposed Action

The Diablo Trust is an incorporated, non-profit, land management collaborative team in the Flagstaff, Arizona, area comprised of grazing permittees for the Bar T Bar and Anderson Springs Allotments, ranchers, environmentalists, Forest Service personnel, other county, state and Federal agency personnel, Northern Arizona University faculty, recreationists, and other citizens. The Diablo Trust developed a proposed action that was designed to correspond to the differing viewpoints represented within the Diablo Trust and to correspond with Forest Service NEPA procedures. The proposed action was focused on providing flexibility in management [PR 15].

However, the Diablo Trust's proposed action was programmatic in nature and not site specific. The nonsite-specific nature of their proposed action was difficult to analyze and compare (especially the cumulative effects) to the other site-specific alternatives due to the lack of details about the types of treatments and where they would take place. This alternative did not satisfy NEPA requirements that all alternatives need to be site-specific in nature in order to evaluate them.¹ For these reasons this alternative was eliminated from further study. It must be noted that

¹ NEPA is also done at a programmatic level, such as the Forest Plan, but for the implementation of projects under the auspices of the Forest Plan, site-specific disclosure of effects must occur. Authorizing a grazing permit and disclosing the effects of on-the-ground actions planned with that permit are site-specific actions.

Diablo Trust's proposed action had much merit. The Forest Service took their proposed action and added in site specificity, maintaining the integrity of the original proposal. This proposal became Alternative 3.

Herding

Public comments on the DEIS suggested herding to address issues with livestock fencing in pronghorn habitat. It was suggested that removal of existing fencing and the use of herding to manage livestock distribution on both allotments would be better for pronghorn. This alternative was not considered for detailed analysis for several reasons:

- Herding requires skills and resources no longer commonly available in this part of the country, therefore, to rely on herding as a means of positive livestock control is not practical.
- Livestock movements on the Bar T Bar and Anderson Springs Allotments could not be accomplished in a timely or cost effective manner if herding was used as the primary tool for distribution of livestock, based on the large size of the allotments, the number of herds, the proposed number of permitted livestock, and the intensity and complexity of grazing management on both allotments.

Pronghorn Habitat Improvement with No Livestock Grazing

Based on comments to the DEIS that Alternative 4 was not adequate to address all of the needs of pronghorn in the project area, it was suggested that an alternative be developed to address additional habitat needs for this species. It was suggested that all livestock grazing be discontinued on both allotments to allow for development of cover and recovery of cool season and forb plant species, and that all existing fencing be removed in pronghorn habitat to facilitate easier movement between summer and winter range. This alternative was not considered in further detail for the following reasons:

- It is unlikely that meaningful pronghorn habitat improvement will be feasible without participation from the ranching community especially in the form of maintaining water developments and assistance with large-scale pinyon and juniper removal.
- Managing for improved pronghorn habitat to the exclusion of livestock grazing does not meet the purpose and need identified for this project.
- Exclusion of livestock grazing is already considered in Alternative 2 - No Grazing, No Action.

Wetland Habitat Improvement with No Livestock Grazing in Pastures with Key Wetlands

Public comments on the DEIS suggested that management of wetlands was not adequately considered in any of the alternatives. It was determined that an alternative be developed that addresses wetland management using livestock exclusion from pastures where key wetlands are located. There was concern that heavy grazing was altering the plant communities within the wetlands, reducing habitat quality for pronghorn, mule deer, nesting waterfowl, and a variety of other wildlife and invertebrate species. This alternative was not considered in further detail because Alternative 2 (the no livestock grazing alternative) would in effect implement this proposal. Alternatives 6 and 7 will meet the intent of this suggestion because those seasonal and semipermanent wetlands with the potential for nesting habitat will be excluded from livestock grazing (with the exception of lanes in Alternative 6) through the construction of wetland

exclosures. Alternatives 6 and 7 will provide year-round protection from livestock grazing in these wetlands. Therefore, this alternative was eliminated from detailed analysis.

Public Involvement

In the spirit of collaboration, the Diablo Trust was approached by the Blue Ridge district ranger in 1998 to develop a proposed action for management of the Bar T Bar and Anderson Springs Allotments with participation from the Forest Service. The Diablo Trust's proposed action was developed over a period of more than a year. It was designed to correspond to the differing viewpoints represented within the Diablo Trust and to correspond with Forest Service NEPA procedures. The Diablo Trust's proposed action focused on providing flexibility in implementation of the actions proposed. Their proposed action included management actions on both Forest Service administered lands that primarily make up the summer livestock grazing component, and Arizona State Trust lands and private lands that provide for winter grazing. The Diablo Trust presented their proposed action to the Forest Service on January 28, 1999 [PR 15].

A project initiation letter (PIL) dated January 4, 1999 [PR 14], officially started the NEPA analysis process.

The Diablo Trust's proposed action, although very thorough, was programmatic in nature and not site-specific as required by Council of Environmental Quality (CEQ) regulations for implementing NEPA. The Diablo Trust supported the idea to use their proposed action as a template and springboard for the Forest Service to develop a more site-specific proposed action [PR 137]. It is this site-specific proposed action, Alternative 3, that is analyzed in the FEIS and is described in Chapter 1, "Proposed Action" and Chapter 2, "Alternatives."

In April 1999, a scoping package containing the proposed action was distributed for review and comment to about 700 individuals, organizations, and cooperating resource agencies [PR 26]. Additionally, the complete proposed action was available on The Diablo Trust's Web site. An open house was held on April 21, 1999 [PR 30].

One hundred and thirty-four comments [PR 56] were received as a result of the scoping, open house, and other opportunities for comment. From the comments, significant issues were identified and used to develop alternatives for managing the Bar T Bar and Anderson Springs Allotments.

A Notice of Intent to prepare an environmental impact statement was published in the Federal Register on February 13, 2001 [PR 126]. Two responses were received indicating an interest in receiving the draft environmental impact statement.

The draft environmental impact statement (DEIS) was completed and made available for review on December 5, 2003 [PR 213]. The official comment period ended on January 19, 2004. The comment period was extended by the Coconino National Forest supervisor for an additional 15 days at the request of commenters [PR 214]. A Notice of Intent Correction was prepared and published in the Federal Register on September 17, 2004, updating the schedule of publication, changing the deciding official and updating the contact information [PR 264].

The Forest Service received 36 comment letters on the DEIS [PR 216]. Several were of a general nature giving opinions and positions relative to the issue of grazing. The balance of the letters included substantive comments and helped the interdisciplinary team generate additional alternatives for analysis. We received letters from several environmental organizations, permittees, the University of Arizona and governmental agencies, just to name a few. These

letters, the disposition of them and the Forest Service's responses to the comment letters can be found in the Project Record [PR 259B].

The main concerns were that grazing practices are resulting in reduced hiding cover, altered plant species composition, invasion of woody species into grasslands, and reduced forage quality and quantity for pronghorn. Other concerns were that actions did not address management of wetlands within the analysis area, especially ephemeral wetlands, seasonal and semipermanent wetlands. Refer to the FEIS, Chapter 2 – Alternatives.

Findings Required by Other Laws and Regulations

The planning and decisionmaking process for this project was conducted in accordance with all applicable laws, regulations, policies and plans. This section briefly describes our findings regarding the legal requirements most relevant to this project decision.

National Forest Management Act of 1976 (NFMA)

This decision conforms with the National Forest Management Act of 1976, for pinyon pine, juniper and ponderosa pine vegetation treatments and is addressed in the FEIS, Chapter 3, "Vegetation" and in the Project Record [PR 51].

National Environmental Policy Act of 1969 (NEPA)

This decision conforms to the National Environmental Policy Act of 1969, utilizing a systematic, interdisciplinary approach in planning and decisionmaking which may have an impact on man's environment.

Coconino National Forest Plan of 1987 (as amended) [PR 4] and Forest Plan Consistency

This decision to implement Alternative 6 is consistent with the "Coconino National Forest Land Management Plan" direction, standards and guidelines and long-term goals and objectives [PRs 202 and 268].

Forest Service Manual 2203.1

It is Forest Service policy to make forage available to qualified livestock operators from lands suitable for grazing consistent with forest plans. This decision is consistent with this direction.

Forest Service Manual 2202.1

It is Forest Service policy to continue contributions to the economic and social well-being of people by providing opportunities for economic diversity and promoting stability for communities that depend on range resources for their livelihood. This decision is consistent with this direction.

Burns Amendment No. 508 to H.R. 1158, Public Law 104-19, July 27, 1995, Section 504

(a) **Schedule for NEPA Compliance:** Section 504(a) requires each National Forest System unit to identify all allotments for which NEPA analysis is needed. These allotments must be included in a schedule that sets a due date for the completion of the requisite analysis. Section 504(a)

requires adherence to these established schedules. The schedule may not require the completion of NEPA analysis for more than 20 percent of the listed allotments prior to October 1, 1996.

(b) **Re-Issuance Pending NEPA Compliance:** Sections 504(b) and (c) state that if a grazing permit expires or is waived and the permit authorizes grazing in one or more listed allotments for which the scheduled NEPA analysis has yet to be completed, the Forest Service must issue a new term grazing permit upon the same terms and conditions, including the length of the term, as the one which expired or was waived, unless there are reasons other than the lack of the necessary NEPA analysis which justify not issuing a permit.

This decision complies with the Burns Amendment by completing the required NEPA analysis.

Executive Order 11990 (Protection of Wetlands)

This decision satisfies Executive Order 11990 by providing for protection of 97 percent of seasonal and semipermanent wetland acres through construction of grazing exclosures and maintains proper functioning condition of these wetland sites through maintaining biomass onsite.

Surface Water Statutes, ARS §§ 45-140 – 45-310

This decision satisfies the Surface Water Statutes providing lane access to stock ponds that have valid existing water rights and valid existing water claims. Exceptions to the above are at Cow Lake, Melatone Lake and Pine/Camillo Lakes where replacement water developments will be constructed. At these sites water claims, severance and transfer of the existing claims will take place.

Executive Order 13186 (Protection of Migratory Birds)

The FEIS analyzed the effects of the proposed actions on species of concern listed by Partners in Flight, the effects on important bird areas identified by Partners in Flight, and the effects to important over-wintering areas, to ensure that migratory birds would not suffer major losses of habitat.

Endangered Species Act of 1973 (ESA) and all amendments

Alternative 6 complies with the Endangered Species Act and incorporates appropriate Forest Plan guidelines for habitat needs of the Mexican spotted owl and northern goshawk and other threatened, endangered, and sensitive species.

The Bar T Bar Allotment provides habitat for six federally listed threatened and endangered species: southwestern willow flycatcher, bald eagle, Mexican spotted owl, black-footed ferret, Little Colorado spinedace and the Chiricahua leopard frog. The U.S. Fish and Wildlife Service concurred with the Forest Service's findings that project actions on the Bar T Bar Allotment "may affect, but will not likely adversely affect" the six species and critical habitat for the Mexican spotted owl and Little Colorado spinedace.

The Anderson Springs Allotment provides habitat for two federally listed threatened and endangered species: bald eagle and black-footed ferret. The U.S. Fish and Wildlife Service concurred with the Forest Service's findings that project actions on the Anderson Springs Allotment "may affect, but will not likely adversely affect" the two species. No critical habitat is designated on the allotment. The Forest Service determined that the project would have "no effect" on the southwestern willow flycatcher, the Mexican spotted owl, the Little Colorado

spinedace, and the Chiricahua leopard frog, or critical habitat for the spinedace and spotted owl on the Anderson Springs Allotment due to the lack of suitable habitat.

Coconino National Forest Sensitive Species

The allotments provide habitat for 24 species listed as sensitive by the Regional Forester for Region 3 of the USDA Forest Service. The sensitive species are American peregrine falcon, common black-hawk, northern goshawk, northern leopard frog, southwestern toad, mountain silverspot butterfly, blue-black silverspot butterfly, spotted skipperling, Maricopa tiger beetle, hairy-necked tiger beetle, early elfin, Arizona bugbane, Mogollon thistle, Eastwood alum root, cliff fleabane, Rusby's milkvetch, Tusayan rabbit brush, Flagstaff pennyroyal, Arizona sneezeweed, Flagstaff beardtongue, Navajo Mountain Mexican vole, California floater, round-tail chub, and Little Colorado sucker.

The Forest Service determined that the actions "may impact individuals, but are not likely to result in a trend toward Federal listing or loss of viability" for 17 species, including northern leopard frog, southwestern toad, northern goshawk, roundtail chub, Little Colorado sucker, mountain silverspot butterfly, hairy-necked tiger beetle, Maricopa tiger beetle, blue-black silverspot butterfly, early elfin, spotted skipperling, Rusby's milkvetch, Tusayan rabbitbrush, Flagstaff pennyroyal, Arizona sneezeweed, Flagstaff beardtongue, and Navajo Mountain Mexican vole. It was determined that project actions would have "no impacts" on seven species, including peregrine falcon, common black-hawk, Arizona bugbane, Mogollon thistle, cliff fleabane, Eastwood alum root, and California floater.

Management Indicator Species

The FEIS disclosed forest-wide habitat and population trends and analyzed the effects of the proposed actions on 15 management indicator species and their habitat and population trends. Many of the project actions were specifically designed to improve habitat for two MIS species: pronghorn and cinnamon teal. The preferred alternative would improve forest-wide habitat trends for these two species and for mule deer. It would lead to stable trends for pronghorn and mule deer and an increasing trend for cinnamon teal habitat. These improvements would contribute positively to forest-wide population trends, but the trend for mule deer would continue to decline. We are unable to conclude whether population trends would change for pronghorn or cinnamon teal.

Multiple Use-Sustained Yield Act of 1960, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, and National Forest Management Act of 1976

Where consistent with other multiple-use goals and objectives there is congressional intent to allow grazing on suitable lands. The Bar T Bar and Anderson Springs Allotments contain lands identified as suitable for domestic livestock grazing in the Coconino National Forest Plan. Continued domestic livestock grazing is consistent with the goals, objectives, standards, and guidelines of the Forest Plan [PR 4].

Executive Order 12898 (Environmental Justice)

Implementation of Alternative 6 is not anticipated to cause disproportionate adverse human health or environmental effects to minority or low-income populations.

National Historic Preservation Act (NHPA) of 1966 (as amended); the Archeological Resource Protection Act of 1979; the American Indian Religious Freedom Act of 1978

The cultural resources clearance has been completed with concurrence from the State Historic Preservation Officer and is located in the Project Record [PR 55].

Federal and State Permits

Clean Water Act, Section 404 of 1977 (as amended)

In order to facilitate the maintenance and cleaning of stock tanks and for the maintenance and construction of new waters (if they are located within a “Waters of the United States”), a “Dredge and Fill Permit” will need to be obtained from the Corp of Engineers.

Clear Air Act of 1970 (as amended)

Prior to the ignition of any prescribed fires, approval from the Arizona Department of Environmental Quality (ADEQ) will be obtained to ensure that air quality standards for emissions and/or pollution are not exceeded.

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 means actually doing the ground-disturbing actions described in this notice.

Administrative Review or Appeal Opportunities

This decision is subject to appeal in accordance with 36 CFR 215.7 and 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 publication date in the Arizona Daily Sun, newspaper of record, 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 substantive comments during the 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:

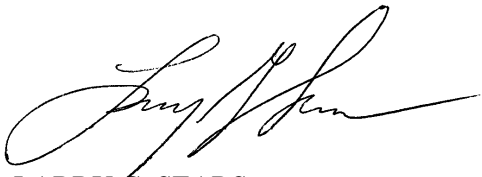
Forest Supervisor
Appeal Deciding Officer
Coconino National Forest
1824 S. Thompson Street
Flagstaff, AZ 86002

Office business hours for those submitting hand-delivered appeals are: 8 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), and Word (.doc) to *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).

Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Carol Holland, District Planner, Mogollon Rim Ranger District, HC 31, Box 300, Happy Jack, AZ 86024 or by phone at (928) 477-2255.



LARRY G. SEARS
District Ranger
Mogollon Rim Ranger District

02/03/05

DATE



TERRY MARCERON
District Ranger
Mormon Lake Ranger District

02/03/05

DATE