

Record of Decision

Buck Springs Range Analysis
USDA Forest Service
Mogollon Rim Ranger District, Coconino National Forest
Coconino County, Arizona

Final Environmental Impact Statement**Decision and Rationale***Background*

The Buck Springs Range Allotment is located on the Mogollon Rim Ranger District of the Coconino National Forest, in Coconino County (Figure 1). The Allotment includes approximately 70,000 acres of Forest Service lands primarily within the East Clear Creek watershed southeast of State Highway 87, and mostly south of East Clear Creek. It is located approximately 60 miles southeast of Flagstaff, Arizona and approximately 50 miles south of Winslow, Arizona.

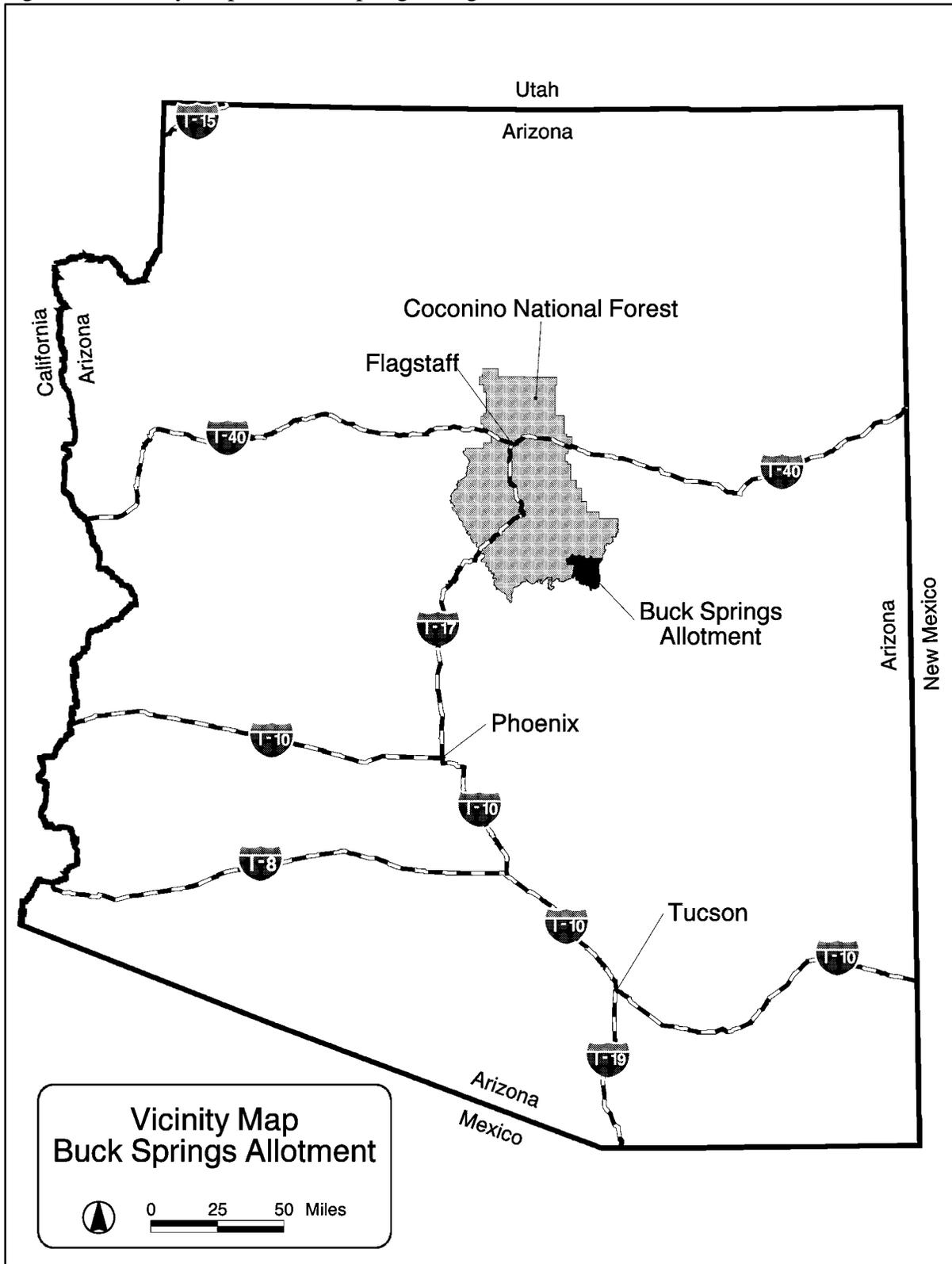
The need to address rangeland and livestock management arises from the expiration of the grazing permit and the requirement to conduct environmental analyses prior to making a decision on whether to issue a new permit. The lack of a coordinated management plan for the Buck Springs Allotment, and conflicts between livestock management and threatened, endangered, and sensitive species concerns as well as watershed health also drive this analysis.

The purpose of this analysis is therefore to evaluate the effects of the Proposed Action and other alternatives to management of the allotment on biological, social, cultural, and economic resources. The combined objectives of the project strive to promote a healthy watershed that provides suitable habitat for threatened and endangered species while providing forage for domestic livestock in areas appropriate for livestock grazing. The analysis responds to goals and objectives of the Coconino Forest Plan (USDA 1987, amended 2003). The environmental impact statement (EIS) documents the detailed analysis of eight alternatives to meet this purpose and need.

Decision

Based upon my review of all alternatives, I have decided to implement Alternative G as described in the Final Environmental Impact Statement (FEIS) for the Buck Springs Range Analysis authorizing the issuance of a 10-year grazing permit for the Buck Springs Range Allotment on the Mogollon Rim Ranger District, Coconino National Forest.

Figure 1: Vicinity Map for Buck Springs Range Allotment.



I find Alternative G is the most appropriate management approach to take at this time. It responds best to the issues and concerns of those who are interested or affected by the activities to be implemented.

Alternative G proposes to focus livestock use in the northern pastures, with the structures that are needed to protect meadows and riparian areas for recovering watershed function and the Little Colorado spinedace. These pastures generally do not include headwater meadows, and the topography restricts livestock access to sensitive riparian drainages. Most of the southern pastures that include headwater meadows and shallow drainages are removed from grazing. However, livestock would have some access to the more shallow drainages that are not overly steep.

A rest-rotation strategy would be implemented on the allotment, with pastures grazed one year in two. The allotment would be managed with an east management unit called the Buck Springs Unit, and a west management unit called the Battleground Unit. The proposed improvements (fences, waterlots, corrals, and cattleguards) are the minimum number required to provide effective protection for the riparian areas and associated wildlife species (i.e., Little Colorado spinedace). One pasture split would rely on a drift fence, resulting in one additional pasture, while two additional pastures would be reduced in size. One entire pasture and two partial pastures would no longer be grazed. This alternative would transfer more of the costs for improvements to the permittee.

New fences proposed by this alternative are those fences necessary to protect Little Colorado spinedace habitat. The Forest Service would provide materials for fences and corrals required for a viable rest-rotation strategy. The permittee would be responsible for construction and maintenance and for the materials and labor for other critical fences, in order to use additional pastures.

Specifically, Alternative G proposes to:

- 1) Issue a 10-year grazing permit for up to 393 cow/calf pairs (or equivalent yearlings), and 8 horses for the Battleground Management Unit, and 250 cow/calf pairs (or equivalent yearlings) and 8 horses for the Buck Springs Management Unit. Establish a rest-rotation grazing system, with the Battleground Unit grazed in even years and the Buck Springs Unit graded in odd years (or the reverse). Approximately half of the pastures would be rested on a yearly basis.
- 2) Use fencing, livestock trailing, control of waters, and cattleguards to manage the distribution of livestock grazing and utilization of upland native species, to avoid sensitive areas. Construct 13.5 miles of new fence and up to two corrals, three waterlots, and two drylots to control livestock distribution.

- 3) Establish livestock exclosures to promote improved meadow conditions around one spring and in three meadows. Construct elk and livestock exclosures around two springs. Construct a holding pasture to be used as a horse pasture in the North Pinchot pasture.
- 4) Manage livestock and wildlife to achieve maximum site-specific utilization levels of 35% in pastures with sensitive areas, and maximum levels of 45% in upland pastures with no sensitive areas. An additional 5% utilization would be allowed in years of above average precipitation and production.
- 5) Close 0.2 miles of Forest Road 9713G where a new fence crosses the road.

When compared to other alternatives, this alternative will provide for the most protection for riparian habitats and the threatened Little Colorado spinedace, while allowing for livestock use of the allotment.

Alternative G addresses the issues raised by scoping.

- 1) Alternative G accounts for the large elk population on the allotment. Capacity of the allotment was calculated using forage production measurements, forage required by the estimated elk population of 1999, and utilization standards for the allotment.
- 2) Alternative G implements a rest-rotation strategy that allows for each pasture to be rested every other year. Herding may be used to improve distribution of livestock, but is not a requirement.
- 3) Alternative G requires the minimum number of range requirements to provide protection for occupied, suitable, and potential habitat for the Little Colorado spinedace. In addition, the permittee would assume more of the costs for implementing the management plan than is traditional.
- 4) Alternative G provides the highest protection for the Little Colorado spinedace and its habitat of all the action alternatives. Livestock would be excluded from all meadows five acres or greater, and from 65% of the riparian drainages. All grazed areas would be rested every other year.

Alternative G best addresses the purpose and need by coordinating management of the entire allotment and by greatly reducing impacts to watershed conditions, sensitive habitats, and threatened and endangered species. The Coconino Forest Plan specifies that the management emphasis for Management Area 3 is multi-use, including livestock grazing, where this activity is compatible with other resources. Alternative G would have no effect on water quality. Impacts to soil conditions are minimized by not grazing several of the southern pastures where headwater meadows with unsatisfactory soils are located. Riparian drainages would have the highest probability of improvement for the action alternatives, with the fewest number of miles accessible to livestock and resting those every other year. These measures would result in the highest level of improvements to Little Colorado spinedace habitat of the

action alternatives. Occupied spinedace habitat is protected. Therefore, Alternative G allows for livestock grazing where impacts to other resources are minimal.

Alt G has the second lowest cost of all alternatives for the Federal Government and the third lowest federal expenditures for range improvements. Alternative A (No Grazing) has the lowest overall costs and lowest expenditures for range improvements. Though Alternative B (No Action, Current Management) has higher administration costs, it has no expenditures for range improvements. Alternative G provides the highest level of resource protection of the grazing alternatives, especially for occupied, suitable, and potential habitat for the Little Colorado spinedace (LCS) and for improving watershed conditions. It allows for a viable livestock operation and coordinates the management of the entire allotment. Only alternative A provides higher levels of protection for LCS habitat and watershed health, since it removes all livestock from the allotment.

Alternative G incorporates all practical means to avoid or minimize environmental harm. I believe that this alternative does all that can be done to provide resource protection while allowing a livestock operation to function. Despite the intensive controls and mitigation measures, the alternative would continue to allow minor indirect impacts to the threatened Little Colorado spinedace and Critical Habitat. The US Fish and Wildlife Service determined that with the restrictions and mitigations imposed by Alternative G, this project would not jeopardize the continued existence of the species. Only total removal of livestock would provide for greater improvements in watershed conditions and threatened and endangered species habitat. All reasonable and prudent measures, and terms and conditions specified in the Biological Opinion of April 30, 2003 would be implemented.

Alternative A eliminates livestock grazing and does not implement the Coconino Forest Plan by failing to emphasize multiple-uses of Management Unit 3, 6, and 9.

Alternative B (current management) was not chosen for two major reasons. It does not provide adequate protection for sensitive habitats and threatened and endangered species (especially the Little Colorado spinedace, LCS). It allows livestock access to occupied, suitable, and potential habitat for LCS. Management would be governed by annual consultations with USFWS, which are costly and time consuming, and leave much uncertainty concerning annual livestock use of the allotment.

The permittee supports a grazing strategy that relies heavily on herding to protect sensitive habitats and species (Alternatives D and K). The 1999 Biological Opinion on Ongoing Grazing in Region 3 from the US Fish and Wildlife Service (USFWS), with subsequent amendments, allowed for three years of experimentation with herding on the allotment. Throughout the three years, there were problems with animals breaking away from the herd and getting into other pastures or drainages. Though herding showed some success in "training" the majority of the animals to respond to the "herder" and to move as more of a group, it lacked the control required to keep animals out of sensitive habitats. Herding may certainly be used to supplement more intensive controls such as fencing, but cannot be relied on as the primary means of animal control. Therefore, Alternatives D and K were not chosen.

Alternative G provides greater protection and enhancement of watershed, soil, and riparian conditions and improvements in habitat for the Little Colorado spinedace and other TES species, than Alternatives B, C, D, E, F, and K. It has the highest benefit/cost (B/C) ratio, the lowest overall costs, and the lowest expenditures for range improvements for the federal government, of Alternatives C through K. Though four other alternatives have better B/C ratios for the permittee, Alternative G does show a positive B/C. Two alternatives, E and F, show B/C ratios less than 1.0 for the permittee.

The decision to close 0.2 of a mile of the 9713G with pasture fencing in Alternative G is supported by background analysis. The East Clear Creek Roads Analysis identified this road as having riparian stream channel and hydrologic connectivity, as well as access into threatened and endangered species habitat along Leonard Canyon. The analysis further pointed out that the road is not necessary to access private land, major identified recreation sites, or Forest Service administrative sites. The Roads Analysis did not make a decision to keep this road open or closed, it merely identified the stressors to aquatic and wildlife, and the access needs of the road. The decision to close 0.2 miles at the end of the road under this ROD will maintain a portion of the access and will eliminate the portion of the road that is affecting the stream and threatened species habitat.

Other Alternatives Considered

In addition to the selected alternative, I considered seven other alternatives, which include a no action alternative (current management), a no grazing alternative, and five additional action alternatives that propose a variety of livestock management strategies. Three other alternatives were considered but eliminated from detailed analyses. Alternative A was the environmentally preferred alternative. A more detailed comparison of these alternatives can be found in the EIS in Chapter 2: Management Alternatives.

Summary Of Alternatives

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

Alternative A: No Grazing

This alternative would eliminate livestock grazing from the Allotment for a period of at least 10 years. There would be no activities associated with livestock grazing under this alternative, though some monitoring may take place, especially for elk use and general utilization rates of wildlife. Range improvements may be left in place, unless they create hazards for people or wildlife. This alternative proposes no actions. Expenditures of public funds would be made for monitoring or disposing of range improvements.

Alternative B: *No Action (current management)*

Under the No Action alternative, current management plans would continue to guide management of the project area. The No Action Alternative is guided year by year by permittee instructions through the Annual Operating Instructions. No improvements are proposed, though some may be required through annual consultation. The permittee and U.S Forest Service would share in the costs of all improvements.

Alternative C: *Moderate Level of Improvements (original Proposed Action)*

This alternative continues the deferred-rest-rotation strategy and includes fences to exclude livestock access to sensitive spinedace habitat and headwater meadows. Three pastures would be split to improve livestock distribution, resulting in three additional pastures. The permittee and U.S Forest Service would share in the costs of all improvements.

Alternative D: *Herding Emphasis*

This alternative relies heavily on herding of livestock to control access to sensitive areas such as headwater meadows and riparian areas, and all pastures may be used. If for any reason, the permittee is unable to "herd" the cattle temporarily, livestock grazing would be restricted to pastures used in Alternative E.

Some new fences are proposed to exclude all livestock from critical spinedace locations and habitats, and to facilitate herding of the livestock. Other current fences not needed for spinedace protection or described in the previous paragraph, may not be maintained on a regular schedule, and may deteriorate. A high number of waterlots, corrals, and training pastures are proposed to facilitate control of livestock, but all may not be constructed. No pastures would be split. Herding of livestock is expected to improve livestock distribution and reduce problems of over- and under-utilization. The permittee and U.S Forest Service would share in the costs of all improvements.

Alternative E: *Northern Pasture Emphasis* topography restricts livestock access to sensitive riparian drainages. Additional structures needed to protect meadows

This alternative primarily uses the northern pastures of the allotment to provide maximum protection to sensitive riparian systems and to recover the Little Colorado spinedace. These pastures do not include major headwater meadows, and the topography restricts livestock access to sensitive riparian drainages. Additional structures needed to protect meadows and riparian areas would be constructed. Two pastures would be split, creating two additional pastures and improving livestock distribution in those pastures.

Table 1: Summary of the components of alternatives for management of livestock on the Buck Springs Range Allotment.

ALTERNATIVE COMPONENTS	Alt. A No Graze	Alt. B No Change	Alt. C Proposed Action	Alt. D / K Herding	Alt. E Northern Pastures	Alt. F Rest- Rotation	Alt. G North Rest-Rot.
Permitted Livestock (#cow/calf) and (#horses)	0 0	746 8	669 8	780 8	531 8	407 8	E ½/W ½ 393/250 8
Grazing strategy	None	Defer- Rest- rotation	Defer- Rest- rotation	Defer- Rest- rotation	Defer- Rest- rotation	Rest rotation	Rest rotation
Acres in Rotation	0	68,010	60,078	59,717	43,832	66,449	45,876
# livestock pastures	0	23	24	25	23	29	22
Current Fence (miles)	90	90	90	90	90	90	90
Proposed new perm.fence (mi)	0	0	22	13.5/11.4	18	33	13.5
# cattleguards	0	0	5	0	3	8	2
# corrals	0	0	2	3	4	4	2
# waterlots	0	0	3	12	6	7	3
# drylots	0	0	1	6	2	3	2
Precommercial Thinning (acres)	0	0	1,500	1,000	200	200	200
Frog ponds	0	0	10	6 / 0	3	8	0
Roads closed (miles)	0	0	1.6	1.2	0.2	1.6	0.2
# new tanks	0	0	1	0	0	1	0
# meadows excluded (new)	all	0	6	5	all	6	all
#springs excluded (new)	all	0	1	1	3	3	3
Miles of road closed	0	0	1.6	1.2	0.2	1.6	0.2
# training pastures	0	0	0	4	0	0	0
Utilization Standards (%)	N/A	25/30/40	25/30/40	25/30/40	30/40	30/35/45	35/45

Fences critical to this alternative are those fences necessary to protect Little Colorado spinedace habitat. The Forest Service would provide materials for those fences and corrals required for the use of pastures needed for a viable deferred-rotation strategy. The permittee would be responsible for construction and maintenance of these fences, and the materials and labor for other critical fences, in order to use additional pastures.

Alternative F: *Rest Rotation*

This alternative splits the allotment into an east management unit and a west management unit. Each unit is grazed every other year, allowing approximately half of the allotment to be rested each year. The large amount of improvements (fences, waterlots, corrals, cattleguards) would ensure protection for the Little Colorado spinedace and its habitat, and provide more control over the distribution of livestock. Pasture splits would result in six additional pastures, reducing problems of over- and under-utilization and allowing for one year of rest in two years. The permittee and U.S. Forest Service would share in the costs of all improvements.

Alternative K: *Herding Emphasis with Temporary Fences*

This alternative is identical to Alternative D with the following exceptions:

Construct 11.4 miles of permanent fence and replace 2.1 miles with temporary fences. No stock tanks would be altered to improve habitat for leopard frogs.

Alternatives Considered But Eliminated From Detailed Study

Three alternatives were considered but eliminated from detailed study as described below.

Alternative H – *Maximum Improvements to Control Distribution and duration of Grazing.*

Alternative I - *Maximum Improvements Primarily In Northern Pastures.*

Alternative J - *Maximum Reliance on Herding.*

Alternatives H and I proposed the highest miles of new fencing of all the alternatives, which would create substantial new hazards for many wildlife species, and an exorbitant financial burden for both the permittee and the federal government. Concerns over access to sensitive habitats for TES species are addressed in various ways by other fully developed alternatives. Therefore, it was felt that these alternatives were duplicative of other alternatives, that the amount of additional fencing would cause unnecessary harm to wildlife, and that the alternatives would be economically impractical.

The permittee submitted Alternative J in response to the DEIS. This alternative retained the current permitted numbers of 746 cow/calf pairs, and relied almost exclusively on herding. A total of 4.2 miles of fence were proposed, along with the use of all current pastures.

Alternative J was evaluated by the ID Team to determine whether it met the objectives of the project. It was determined that the alternative would not provide adequate protection for threatened species and sensitive habitats such as riparian areas and wet meadows. The team took the alternative and determined which permanent fences could be replaced with temporary fences while maintaining adequate protection for these habitats. This assessment resulted in the development of Alternative K, which was taken through detailed analysis.

Chapter 2 of the FEIS briefly summarized these alternatives, along with the associated rationale for eliminating them from further study.

Public Involvement

The East Clear Creek (ECC) watershed, which includes 96% of the Buck Springs Range Allotment, has received much scrutiny in recent years. In 1995, a collaborative group comprised of state and federal agencies, local residents, interested people, and tribal representatives initiated an ecosystem assessment of the watershed. The Collaborative Team described existing and desired future functioning conditions of the watershed, and developed lists of possible management practices to take the watershed towards desired conditions. The work of the Collaborative Team was incorporated into a dynamic binder of documents entitled *East Clear Creek Ecosystem Management Area: Existing Conditions and Visions for the Future* (USDA 1996). The work of the Collaborative Team was taken forward into the analysis of the Buck Springs Range Allotment.

The environmental analysis process for the Buck Springs Range Allotment was initiated by a project initiation letter dated June 25, 1998 [Project Record #2]. An Interdisciplinary Team (Team) of Forest Service resource specialists, and representatives from the Arizona Game and Fish Department (AGFD), US Fish and Wildlife Service (USFWS), Arizona Department of Environmental Quality (ADEQ), Arizona Cooperative Extension, and the Allotment Permittee (permittee) developed a guiding document for watershed recovery before undertaking an analysis of the allotment. They described the many factors affecting watershed conditions and a threatened fish species within the allotment, including elk and livestock grazing, recreation, transportation system, and introduced aquatic species. In a cooperative effort, the agencies making up the Team developed the *East Clear Creek Watershed Recovery Strategy for the Little Colorado Spinedace and Other Riparian Species* (ECC Strategy, USDA 1999a) to address many of those factors. Using the strategy to guide actions proposed for the Buck Springs Range Allotment, the Team expanded on existing and desired conditions developed by the ECC Collaborative Team and developed objectives and proposed management practices for the allotment.

The Proposed Action was mailed to 215 individuals, organizations, and cooperating resource agencies for review and comment in April 1999 [Project Record #39]. The proposal called for the continuation of the current deferred-rest-rotation strategy for management of the allotment, and relied on structural improvements to affect distribution of livestock and protect sensitive species and habitats. The proposal also included projects to improve conditions of

the watershed through prescribed burning and thinning of trees and by reducing impacts from road use and management, recreation, and past watershed projects.

A Notice of Intent to write an Environmental Impact Statement was published in the Federal Register on January 8, 2001 [Project Record #89].

The proposals for livestock and range management and the proposals for watershed improvements are within the same analysis area, and are interrelated but independent actions. Different issues arose from the public scoping process for the two sets of actions. During analysis, the complexity of the inclusion of both sets of projects in one document became overly cumbersome. The Forest Supervisor decided to separate the proposals into two separate analyses [Project Record #65], and a second scoping letter for the Buck Springs Range Analysis was mailed on April 6, 2001 [Project Record #103].

From comments received in response to both scoping letters, the Team developed statements to capture the four significant issues raised by the public. Main issues of concern included comments that the carrying capacity of the Proposed Action doesn't account for the large elk population, the deferred rest-rotation would result in overuse on forage plants, the extensive fencing required is not economically feasible, and the proposal continues to impact watershed health and the Little Colorado spinedace (see DEIS pages 7-8). To address these concerns, the Forest Service created the alternatives described above.

Notice of Availability (NOA) was published in the Federal Register and the *Arizona Daily Sun* on October 12, 2001. Copies of the EIS were sent to eight agencies and 40 individuals. These parties responded with 10 individual comment letters. Alternative K was analyzed in response to these comments.

In response to the comments on the DEIS the following changes have been made in the FEIS. These updates and changes resulted in some changes to actual numbers (especially in the economics analysis), but did not change the comparisons among alternatives or the rationale use to make a decision.

- The District name has been changed from the Blue Ridge Ranger District to the Mogollon Rim Ranger District.
- The Economic Analysis was run to update figures used to account for the value of AUMs on the allotment, update fees to 2003, and to account for a slight change in numbers. A table was added to compare costs of improvements that would be borne by the permittee and the US Forest Service.
- The livestock numbers increased slightly by alternative, based on a change made in the calculated forage used per AUD, to align with Forest Service Direction.
- A Report on the Status of Management Indicator Species on the Coconino National Forest was summarized and used to better explain effects.

- The discussion of Cumulative Effects was extensively rewritten to clarify the additive effects of this project to past, present, and future foreseeable projects.
- Clarifying information was added to explain text misunderstood by the reviewers, or to add information that was missing; and numbers were corrected in a few tables.
- Alternative K was added to the EIS to address an issue brought up by the permittee.
- North McClintock Pastures was added into Alternative G as a pasture that may be grazed, with meadow enclosure and drift fence.
- A summary of the EIS was added.
- A soil and water section was added to the Monitoring Plan.

Findings Required by Other Laws and Regulations

The decision to implement Alternative G is consistent with the Coconino Forest Land Management Plan direction and long-term goals and objectives. Alternative G is consistent with Amendment #11 of the Forest Plan for the habitat needs of the Mexican spotted owl and the northern goshawk.

Eight threatened, endangered, and sensitive species are located in the project area (Mexican spotted owl, bald eagle, Little Colorado spinedace, peregrine falcon, northern goshawk, Little Colorado sucker, Mogollon thistle, and cliff fleabane). A “no effect” finding was made for the bald eagle. The USFWS determined that the Forest Service’s actions would “not likely jeopardize the continued existence” of the Mexican spotted owl and the Little Colorado spinedace and would not “result in the destruction or adverse modification of critical habitat” for the Little Colorado spinedace. The Forest Service determined that the actions “may impact individuals, but is not likely to result in a trend toward federal listing or loss of viability” for the following sensitive species: the peregrine falcon, northern goshawk, Little Colorado sucker, Mogollon thistle, and cliff fleabane. These determinations satisfy the requirements of the Endangered Species Act of 1976 and amendments.

Potential habitat exists for the listed southwestern willow flycatcher and Chiricahua leopard frog and 18 sensitive species. The USFWS concurred with the Forest Service findings of “may affect, not likely to adversely affect” the southwestern willow flycatcher and the Chiricahua leopard frog or their habitats. The Forest Service determined that the actions of Alternative G would have “no impact” on three sensitive species and “may impact individuals but would not likely result in a trend toward federal listing or loss of viability” for 15 sensitive species.

The cultural resource clearance has been completed with concurrence from the State Historic Preservation Officer, and is located in the Project Record. This clearance satisfies the requirements of the Historic Preservation Act of 1966, as amended.

Implementation

Implementation Date

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 calendar days following a final decision on the appeal. Implementation means actually doing the ground disturbing actions described in this notice on the ground.

Administrative Review or Appeal Opportunities

The public has the right to appeal this decision under 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 that it is a Notice of Appeal being filed pursuant to the appropriate regulations must be filed within 45 days of the date of legal notice of this decision in the *Arizona Daily Sun*. Appeals must be filed with:

Regional Forester
Southwestern Region
333 Broadway Boulevard
Albuquerque, NM 87102

Contact Person

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

/s/Nora B. Rasure

8/18/03

NORA B. RASURE

Forest Supervisor
Coconino National Forest

DATE