USDA United States Department of Agriculture | Forest Service | Coronado National Forest
Sierra Vista Ranger District | 5990 S. Highway 92
Hereford, Arizona 85615
Phone (520) 378-0311
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File Code: 1950-1/2210
Date: June 2, 2009

Dear Interested Party:

The Sierra Vista Ranger District, Coronado National Forest is initiating an analysis of a proposal to re-authorize livestock grazing in the Redrock Pasture of the Kunde Allotment under the National Environmental Policy Act (NEPA). The enclosed summary describes the purpose and need for the proposal, proposed action, preliminary concerns, and the decision framework.

We are requesting your participation in identifying issues and concerns related to the potential effects of the proposal. Suggestions for additional actions that would facilitate achievement of desired conditions are encouraged. Comments made on this proposal would be most helpful if they are received within 30 days of receipt of this correspondence; however, comments will be accepted throughout the analysis process.

Please provide comments to James Heitholt, Analysis Team Leader, Sierra Vista Ranger District, Coronado National Forest, 5990 South Highway 92, Hereford, Arizona 85615, telephone (520) 803-2830. You may email comments to comments-southwestern-coronado-sierravista@fs.fed.us, or fax: (520) 378-0519. If sending email comments, please include the phrase "Redrock Pasture Analysis" in the subject line. To obtain details about the technical aspects of the proposal, please contact James Heitholt or Tom Lorenz, Range and Watershed Management Staff Officer, Sierra Vista Ranger District, at (520) 803-2831.

Sincerely,

ANNETTE H CHAVEZ
District Ranger

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SCOPING NOTICE AND OPPORTUNITY TO COMMENT

Redrock Pasture - Kunde Allotment

Canelo Hills
Sierra Vista Ranger District
Coronado National Forest
June 2009

The Sierra Vista Ranger District, Coronado National Forest is initiating an analysis of a proposal to re-authorize livestock grazing in the Redrock Pasture of the Kunde Allotment under the National Environmental Policy Act (NEPA). In January 2004, the Redrock Pasture was removed from livestock grazing to reduce impacts to the Gila topminnow and to improve the condition of riparian vegetation in the Redrock Canyon watershed. Changes in resource conditions that have been encouraged by management policy and documented by monitoring since closure indicate that the area has improved to the extent that resumption of grazing in the Redrock Pasture is feasible.

We are beginning a National Environmental Policy Act (NEPA) review of the proposal to re-authorize grazing by asking the public to help us identify issues and concerns related to the proposed action. Public, tribal, and agency input is vital, because it is integrated into our environmental impacts analyses and may be used in the development of mitigation and alternatives to the proposed action, as necessary. Information on how you can comment on this proposal or obtain further information is provided below.

Background

The project area comprises 1,385 acres within the Kunde Grazing Allotment, which is located in the southwestern portion of the Canelo Hills in Santa Cruz County (Figure 1). Elevations within the Redrock Pasture range from approximately 4400 feet at the west end of the project area to over 5600 feet near North Saddle Mountain. Most of the capable rangeland is located below an elevation of 4900. Total capable acres for livestock grazing within the project area are approximately 960, or 69% of the total area. The Kunde Allotment was not stocked by the current permittee from 1998 through July 2008. It is currently permitted for grazing 46 Cow/calf pairs, yearlong.

Vegetation consists of southwestern desertscrub at the lowest elevations, semidesert grasslands and broadleaf woodlands at mid-elevations and at highest elevations. The project area is wholly within the Redrock Canyon watershed. Vegetation associated with the Canyon stream course is a mixture of evergreen oaks and deciduous riparian trees such as sycamore, willow, ash and cottonwood.

Perennial surface water in Redrock Canyon is restricted to a few isolated areas. All perennial stream flow on the Kunde Allotment has been fenced to exclude livestock grazing. The Gate Spring Exclosure is at the east end, and the Falls Exclosure is at the west end of the Redrock Redrock Pasture (shown on Figure 1). A small area of semi-perennial flow (maximum 850 feet or less than ¼-mile long) about a ¼ mile upstream of Redrock Ranch has not been fenced.

Redrock Canyon is identified in the U.S. Fish and Wildlife Service's Recovery Plan for the Gila Topminnow (1998) as essential habitat for the species. Gila topminnows once found in all perennial riparian habitats in the Canyon began to decline in 2001. The species was not found in annual surveys completed in 2006 and 2007. A single topminnow was found in the Cott Tank Exclosure in 2008. The decline in topminnow population has been attributed to the combined effects of drought and predation by non-native mosquito fish. At present, the Forest Service, in cooperation with Arizona Game and Fish, has proposed to treat the Redrock Canyon watershed to remove non-native species and restore Gila topminnow to suitable habitat. This project is the subject of a separate NEPA review.

Purpose of and Need for Action

Since the 2004 decision to remove grazing from Redrock Pasture, the Forest Service has implemented management changes on the allotment and conducted additional monitoring of resource condition. These changed circumstances have lead to the consensus that it would be appropriate to revisit the past decision.

Management Changes. In February 2008, three pastures on the adjacent Weiland Allotment were incorporated into the Kunde Allotment. This action doubled the number of pastures from three to six, which allows the permittee to rest each pasture at least one growing season, every other year. Grazing on these additional pastures increased the capacity of the Kunde Allotment by 15 Cow/calf pairs yearlong.

The Weiland pastures are separated from the Kunde pastures by the Redrock Pasture. Grazing authorization on the Redrock Pasture is needed to facilitate movement of cattle across the entire allotment. In addition, if grazing is authorized in the Redrock Pasture, the opportunity for further rest and flexibility of the other pastures would be added. This added flexibility would increase the sustainability of the livestock operation and help the permittee fully implement an adaptive management strategy that complies with Forest Service policy (FSH 2209.13 Chapter 90). Along with the potential for increasing flexibility and rest, the ability to graze the Redrock Pasture would also increase the capacity of the permit.

Monitoring. In 2003, monitoring data indicated that about 60 acres of the riparian area within the project area did not meet, but was moving towards the standards of the Coronado National Forest Land and Resource Management Plan (Forest Plan; 1986, as amended). In April 2009, following several years of grazing exclusion and rest, riparian conditions in the Redrock Pasture were reevaluated. The results showed considerable improvement in bank stability. In 1999, the data indicated that 7% of the soil banks were protected, and in 2009, the data showed that 40% of the banks are protected. As a comparison, data from the neighboring grazed Crittenden Allotment show bank protection to be 29%. Forest resource specialists are confident that future bank stability in the Redrock Pasture can be maintained at 30% with managed grazing.

Aquatic habitat surveys conducted in 1989, 1996, 2001, and June 2008 across the entire watershed, encompassing four grazing allotments including the Kunde Allotment, show an increase in riparian vegetation, both in quantity and diversity within the Redrock Pasture. It also appears that recovery has leveled off, and the ecosystem has reached its potential.

Since 2003, the current permittee, in conjunction with the University of Arizona and the U.S. Forest Service, has extensively monitored the ecological condition of the Kunde Allotment. The condition trend on this site has continued to be static. That is, little change has been noted in the frequencies of plants since 2003. Litter remains very abundant on the site, and many herbaceous species (grasses) have been noted as being decadent.

Proposed Action

The following proposed action would meet the purpose and need of the project. It consists of four components: (1) authorization, (2) improvements, (3) management practices, and (4) monitoring. Incorporated into these components is an adaptive management strategy that would allow sufficient flexibility in management response to changing circumstances.

1. Authorization

Grazing would be authorized in the Redrock Pasture under the following terms and conditions.

Duration, timing and frequency of grazing. The Redrock Pasture would be authorized for yearlong use, with the goal of using it predominantly in the early fall. Grazing management would be designed to ensure growing season rest for the Redrock Pasture at least every other year to provide for grazed plant recovery. The sequence and timing of Redrock Pasture moves would be based on monitoring of range readiness, ecological condition, and utilization.

Intensity of grazing. Forage utilization would be managed at a level corresponding to light to moderate intensity (30 to 45%)[1], with no more than 30% utilization on riparian trees and shrubs. This forage-utilization guideline would provide for grazed plant recovery, increased plant vigor, and retention of herbaceous litter to protect soils and provide forage and herbaceous cover for wildlife. Key areas for monitoring would be verified or established and monitored to determine use levels. Consistent patterns of utilization in excess of 45% of key species in key areas (or 30% on riparian trees and shrubs) would be used as a basis to modify management practices or take administrative actions necessary to reduce utilization in subsequent grazing seasons.

Administrative actions required to implement the decision. Following a decision by the District Ranger to authorize grazing under the terms and conditions identified above, the following actions would be taken:

- **Grazing Permits.** Issue a new 10-year permit for the Kunde Allotment for 68 Cow/calf pairs yearlong. This increase in permitted numbers reflects the additional capacity that the Redrock Pasture would contribute to the allotment.
- **Allotment Management Plans.** The existing Allotment Management Plan (AMP) would be amended to reflect the new management of the allotment that would include the Redrock Pasture and the former Weiland Pastures into the grazing rotation. The new AMP would also

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[1] *Based on review of numerous grazing intensity studies, Holechek (2004) identifies light to moderate grazing as 32-43% average use of primary forage species. These averages are based on pasture-wide utilization averaged over time. The Forest Service monitors utilization based on the use of key forage species in key areas. Key areas are selected to be representative of management effectiveness over the entire pasture. For the purposes of monitoring, an annual use guideline of 30%-45% of key species in key areas would be used to monitor use in all pastures, which, combined with growing season rest or deferment, should ensure pasture-wide average use of less than 45%.*
[Holechek, J.L, T.T Baker and J.C, Boren. 2004. Impacts of controlled grazing verses grazing exclusion: What we have learned. Range Improvement Task Force Report # 57. New Mexico State University, Las Cruces, NM]

incorporate an adaptive management strategy for the allotment. Under the adaptive management strategy, actual numbers of livestock would vary based on the class of livestock and duration of use and monitoring of utilization and resource condition, but would not exceed the maximum animal-unit months authorized. Grazing systems may also be modified as needed to meet stated management objectives.

2. Improvements

Additional reliable water is needed in the uplands of the Kunde Allotment. Several fences also need to be constructed to manage livestock distribution. Following is a list of proposed improvements. (See Figure 1 for their location.)

- Establish an upland water source in the Redrock Pasture by installing a pipeline and trough off of East Well. This would mitigate grazing impacts in the riparian area by drawing cattle up and out of the Canyon bottom. This water along with the existing Bergier Trick Tank would be managed to minimize livestock movement through the drainage bottom and riparian areas.
- Establish an exclosure that would fence out the semi-perennial water (Homestead Spring) that is found approximately ¼ mile east of the private land in the Redrock Canyon. The exclosure would extend to the north to encompass and protect four cultural resource sites.
- Establish upland waters from the Kunde Headquarters that would deliver reliable water to four of the seven pastures on the allotment. This would be accomplished by installing five storages (5,000 gallons each), approximately five miles of buried pipeline, and six troughs.

Construction impacts of the above improvements would be mitigated by the measures described under Management Practices.

3. Management Practices

To mitigate resource impacts, the following measures will be implemented. These measures have been demonstrated to be successful when used on similar projects and are considered effective at reducing environmental impacts. They are consistent with applicable Forest Plan standards and guidelines and Best Management Practices. Implementation of the mitigation measures and design criteria is intended preclude the occurrence of potentially significant environmental impacts.

Soil, Water and Vegetation. The objective is to mitigate adverse effects of livestock grazing and facility construction by the application of Best Management Practices (FSH 2509.22) and the flexibility afforded by adaptive management. Practices will include, but are not limited to, the following.

- Utilization of key upland herbaceous forage species[2] in key areas[3] will be managed to achieve the goal of light to moderate intensity grazing as a pasture average. The objective is

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[2] *Generally, these are native perennial grasses palatable to livestock.*

[3] *A key area is a portion of rangeland selected because of its location, use or grazing value as a monitoring location for grazing use, range condition and trend. Key areas are usually ¼ to 1 mile from water, located on productive soils on level to intermediate slopes where prescribed use would occur first. They are five acres or more in size. Properly selected key areas would reflect the overall acceptability of current management.*

to protect plant vigor, provide herbaceous residue for soil protection and to increase herbage producing ability of forage plants. A utilization guideline of 30 to 45% use of key species in key areas will be used to achieve this objective.

- Impacts on riparian areas will be mitigated by the development of upland waters, which will provide for optimal livestock distribution by attracting animals from the Canyon bottom and encouraging the use of perennial upland grasses.
- An exclosure fence will exclude the Homestead Spring area of the Canyon bottom from livestock use. This area is the last semi-perennial stretch of water within the Redrock Pasture that is not fenced. If grazing animals do not have access to perennial water in the Canyon bottom, impacts to riparian areas would be minimized.
- The existing Gate Springs and Falls Exclosures will be maintained to exclude livestock.
- Salt will be placed on good feed, from ¼ to ½ mile from water sources, and salting locations would be moved annually. Placement of liquid or bulk supplements will require prior approval of the District Ranger.
- Hay will not be placed on Forest lands in order to minimize the introduction of weeds.

Wildlife. Impacts to wildlife from livestock grazing and from disturbance associated with maintenance of range facilities will be minimized by the following measures:

- All water developments will include wildlife access and escape ramps. Water will be available to wildlife year-round.
- All reconstructed fencing will be built to Forest Plan standards (p. 35) to allow wildlife passage through the fence. At a minimum, these will comprise a 4-strand fence with a smooth bottom wire, placed 16 inches off the ground and having a total height of 42 inches or less.
- To avoid adverse impacts to the lesser long-nosed bat's food supply, range construction projects will be designed to avoid the destruction of agaves. If impacts to agaves are unavoidable, no more than 1% of agaves within ½ mile of a project area will be allowed to be affected.
- All proposed range facilities will be surveyed for threatened, endangered or sensitive species prior to any ground-disturbing activities. Facilities will be designed and constructed so that they will have no adverse effect on listed species. This is particularly relevant to the fencing of the Homestead Spring area, which is potential habitat for the Gila topminnow.
- To provide wildlife cover within areas of high-quality Mearns' quail habitat, herbaceous vegetation will be managed to maintain a minimum of 6 inches of stubble height, which is generally interpreted as less than 45% utilization of key herbaceous species.

Heritage Resources. Protection of heritage resources will be afforded by the following measures:

- All proposed range facilities will be surveyed by qualified personnel for heritage resources prior to any ground-disturbing activities. Facilities will be built or modified to avoid impacts to sites. If unrecorded sites are discovered during the course of project implementation, activities will cease and the Forest or District Archeologist will be notified.
- Range facilities, if needed, will be located so as to avoid concentrations of livestock on known heritage resource sites.
- No salting will occur within or adjacent to identified heritage sites.

The objective of monitoring is [illegible] and whether it is effective at achieving or moving resources toward desired conditions.

Effectiveness monitoring includes measurements to track the condition and trend of upland and riparian vegetation, soil, and watersheds. Monitoring will follow procedures in the Sampling Vegetation Attributes, Interagency Technical Reference[4] and Region 3 Rangeland Analysis and Training Guide.[5] These data will be interpreted to determine whether management is achieving desired resource conditions, whether changes in resource condition are related to management, and whether modifications in management are necessary. Effectiveness monitoring will occur at a minimum of five-year intervals, or more frequently if deemed necessary.

Implementation monitoring will occur annually and will include inspection reports, forage utilization measurements in key areas, livestock counts and facilities inspections. Measurement of utilization will follow procedures in the Utilization Studies and Residual Measurements, Interagency Technical Reference[6] and the *Principles of Obtaining and Interpreting Utilization Data on Southwest Rangelands*[7].

Forage utilization monitoring will focus on key forage species. At a minimum, monitoring will include use in key areas, but may also include monitoring outside of key areas. The District Range Staff Officer and the permittee will be responsible for monitoring utilization. Over time, changes in resource conditions or management may result in changes in livestock-use patterns. As livestock-use patterns change, new key areas may be established, and existing key areas may be modified or abandoned in cooperation with the permittee(s).

Records of livestock numbers, movement dates and shipping records will be kept by the permittee and will be provided to the District Range Staff annually.

Adaptive Management

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[4] *Sampling Vegetation Attributes, Interagency Technical Reference. 1996. Cooperative Extension Service, USDA Forest Service and Natural Resources Conservation Service, and USDI Bureau of Land Management.*

[5] *Rangeland Analysis and Management Training Guide. 1997. USDA Forest Service, Southwestern Region.*

[6] *Utilization Studies and Residual Measurements, Interagency Technical Reference. 1996. Cooperative Extension Service, USDA Forest Service and Natural Resources Conservation Service, and USDI Bureau of Land Management, Revised 1999.*

[7] ***Principles of Obtaining and Interpreting Utilization Data on Southwestern Rangelands. 2005. Arizona Cooperative Extension Service, USDA Forest Service, USDA Natural Conservation Service, Bureau of Land Management, Arizona State Land Department, Arizona Cattle Grower's Association. Revised in 2007***

Changes in resource conditions on an allotment may require changes in grazing management. To allow for prompt response to a need for change, the proposed action incorporates an adaptive management strategy. If monitoring indicates that desired conditions are not being achieved, adaptive management provides flexibility for the Forest, in cooperation with a permittee, to modify annual operating instructions for the allotment. Management changes allowed by this strategy include, but are not limited to, administrative decisions, such as the specific number of livestock authorized annually, specific dates for grazing, class of animal and modifications in pasture rotations. Under the adaptive management strategy, actual numbers of livestock may vary based on the class of livestock and duration of use and monitoring of utilization and resource condition, but would not exceed the maximum animal-unit months authorized.

Preliminary Alternatives

In addition to the proposed action, a no-action alternative will be analyzed. Under this alternative, grazing would not be authorized on the Redrock Pasture and the present exclusion of grazing would be continued. All provisions concerning the maintenance of existing range improvements on the Kunde Allotment and Redrock Pasture would continue.

Other alternatives may be identified or alternatives may be revised if scoping results in the identification of significant issues related to the proposed action that cannot be mitigated, or if additional management practices that can achieve desired conditions are identified.

Preliminary Issues and Concerns

To date, the Forest has not identified any project-related issues that cannot be resolved. Concerns about the general effects of livestock grazing are known from previous NEPA reviews; these will be considered in the analysis and development of alternatives, if warranted. One issue specific to this proposed action is the potential effect of grazing authorization on Gila topminnow habitat in the Homestead Spring area. Potential impacts are planned to be mitigated by excluding this area from grazing with a fence.

The NEPA impacts analysis will evaluate the effects of the proposed action and alternatives on wildlife and plants, including listed threatened and endangered species, species proposed for listing under the Endangered Species Act, and designated critical habitat; Forest Service sensitive species; Forest management-indicator species; and habitat for all the preceding; soil and vegetation; air quality; water resources, including floodplain, wetlands, and municipal watersheds; Congressionally designated areas; archaeological, cultural, and historic resources; and socioeconomics. Issues will be refined or expanded as a result of comments received from the public and other interested parties. Significant issues identified as a result of scoping may be used to formulate additional alternatives, as necessary.

Decision Framework

The Sierra Vista District Ranger is responsible for decisions regarding management of the Kunde Allotment. Based in part on the results of the NEPA analysis, the Ranger will issue a decision document or documents that include(s) a determination of the significance of the environmental effects. The decision(s) will also include a determination of the proposed action's consistency with the Forest Plan and with various laws, regulations and Executive Orders.

If grazing is to be authorized, the Ranger will determine which management actions, mitigation measures and monitoring requirements will be prescribed in the AMP, including permitted number of animals, season of use, allowable utilization standards and the term of the permit.

We Appreciate Your Comments

The Coronado National Forest values public input during the NEPA review process. Your comments about this proposal may be submitted to us in writing by U.S. mail, facsimile, hand-delivery; electronically by email; or in person by telephone or at the District Office. To be most useful in our NEPA review, comments should be submitted to us within 30 calendar days following your receipt of this notice. Comments that are not relevant to this proposed action will not be addressed in the NEPA analysis.

Please note that comments and personal information associated with them, such as names and addresses, become part of the Administrative Record of this NEPA review. Thus, they may be made available to a third-party upon request under the authority of the Freedom of Information Act (FOIA). Your personal information is protected by the Privacy Act. If you do not wish for it to be released, you may choose to not include it with your comments. Or, you may request an exemption from FOIA with your comment submittal. You will be informed by the Forest Service whether or not your request qualifies for an exemption. If it does not, you will have an opportunity to resubmit your comments without personal information or to withhold them altogether.

Please mail your comments, with your full name and address, to Mr. James Heitholt, District Rangeland Management Specialist, Sierra Vista Ranger District, 5990 South Highway 92, Hereford, AZ 85615; or send them by facsimile to (520) 378-0519. You may also submit written comments by electronic mail (email) to comments-southwestern-coronado-sierravista@fs.fed.us in any of the following ways: text of an email, in a Microsoft Word (.doc) attachment, or in rich-text format (.rtf). On written, facsimile, and email comments, please include the phrase "Redrock Pasture NEPA Analysis" in the subject line.

Oral comments may be provided by telephone to Mr. Heitholt on (520) 803-2830, or Mr. Tom Lorenz on (520) 803-2831, Monday through Friday, excluding Federal holidays, from 8:00 a.m. through 4:30 p.m. You may also provide oral comments by making a personal visit to the Sierra Vista Ranger District Office at the address and within the timeframe given above.

For additional information about the technical aspects of this project, please contact Mr. Heitholt or Mr. Lorenz as indicated above. Questions about the NEPA process may be directed to the Forest NEPA Coordinator, Ms. Andrea Wargo Campbell, on (520) 388-8352, or Mr. Rick Gerhart, on (520) 388-8374.

Thank you for your interest and participation in the activities of the Coronado National Forest.