

SUMMARY OF THE MARTIN BASIN RANGELAND PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT

BACKGROUND

Project Area

The Humboldt-Toiyabe National Forest is proposing to continue livestock grazing under a specific management regimen designed to sustain and improve the overall ecological condition of the Martin Basin Rangeland Project area. This project is located on the Santa Rosa Ranger District of the Humboldt-Toiyabe National Forest. The project area encompasses approximately 190,000 acres.

The Martin Basin Rangeland Project includes eight cattle and horse allotments: the Bradshaw, Buffalo, Buttermilk, Granite Peak, Indian, Martin Basin, Rebel Creek, and West Side Flat Creek Allotments. These allotments currently have permitted grazing use with the exception of the Bradshaw and Rebel Creek Allotments, which are vacant.

The project's goal is to manage livestock grazing in order to offer opportunities for continued social and economic value to grazing permittees in a way that sustains the health of the land.

History of the Analysis

This analysis is being conducted at this time because the Rescission Act of 1995 (Public Law 104-19, Section 504) required the development of a schedule to complete the National Environmental Policy Act (NEPA) analysis to reauthorize grazing. The allotments in the Martin Basin Rangeland Project area are scheduled for analysis and disclosure at this time.

In response to the Rescissions Act, the Santa Rosa Ranger District published a Notice of Intent to prepare an environmental impact statement (EIS) on the Martin Basin Rangeland Project in the Federal Register in December 2002. The EIS would analyze the effects of reauthorizing continued livestock grazing within the area.

The Martin Basin Rangeland Project Final Environmental Impact Statement (FEIS) was released in June 2005. The Record of Decision was signed in June 2006 and appealed in July 2006. Following an appeal review, the Regional Forester remanded the decision back to the Humboldt-Toiyabe National Forest for additional analysis.

In February 2007, a Notice of Intent to prepare a supplemental EIS was published in the Federal Register. Subsequently, it was determined that a new EIS would be prepared. A corrected Notice of Intent was published in the Federal Register in October 2008 informing the public of the decision to prepare a new analysis.

PURPOSE OF AND NEED FOR ACTION

Current and prospective term grazing permittees desire to continue grazing in the project area and have invested substantially in base properties, livestock handling facilities, and range improvements. National Forest System lands provide an important source of their livestock forage during parts of the year. For these permittees, ranching provides an economic value, and grazing on National Forest System lands contributes to this economic value.

The purpose and need for the proposed federal action is to contribute continued social and economic value to grazing permittees in a way that sustains the health of the land. In considering this request for continued grazing, we, as land managers, understand that the ultimate driving force, the purpose, if you would, for the harvest of forage by livestock is a desire for economic value infused in many cases with a deeply held cultural identity. We also understand that these benefits accrue primarily to the individual permittees.

The second part of our proposed action involves the modification of the conditions attached to the permit to graze on National Forest System lands. Our scientific understanding of the impacts of grazing has evolved, and we need to incorporate this knowledge into our grazing management system. We are modifying these terms and conditions to incorporate the latest science on grazing management to ensure sustainable ecological conditions on our rangelands.

ISSUES

The Forest Service identified the following issues to be analyzed in detail.

Issue 1: Water Quality

Livestock grazing can lead to increases in erosion, sedimentation, temperature, and pollutants in adjacent surface waters. This would likely affect native fisheries and other aquatic life as well as downstream beneficial uses. These impacts can be minimized by grazing during different times of the season, reducing the amount of grazing in riparian areas, and/or ensuring grazing and trampling is not excessive in adjacent uplands.

Issue 2: Soil Quality

Livestock grazing may negatively affect soil quality and vegetative productivity through compaction, trampling, and redistribution of soil nutrients. Water and wind erosion may increase with excessive livestock grazing. Erosion changes the capacity of the soil to function and limits its ability to sustain future uses. The ability of a plant community to recover after topsoil is lost is restricted.

Issue 3: Fisheries and Wildlife

Fisheries (including Lahontan cutthroat trout)

Livestock grazing has the potential to impact fisheries habitat, including the federally-listed Lahontan cutthroat trout.

Lahontan cutthroat trout and other trout species are identified as a Management Indicator Species (MIS) in the Forest Plan. Lahontan cutthroat trout, German brown trout, Eastern brook trout, and rainbow trout are known to inhabit streams throughout the project area. All native trout waters on the District, regardless of the presence of introduced trout species, are currently being managed with the intent of native trout reestablishment.

The only trout species that is an MIS for capable/suitable trout habitat on the Santa Rosa Ranger District is the Lahontan cutthroat trout. The entire Santa Rosa Ranger District is within the historic capable habitat range of the Lahontan cutthroat trout. The project area is a recovery area for Lahontan cutthroat trout (US Fish and Wildlife Service 1995). Impacts to fisheries and stream habitats associated with improperly grazed livestock have been well documented in scientific literature and by state and federal agencies. Impacts from livestock to streams and fisheries habitat include, but are not limited to increased water temperatures, change in channel morphology, loss of riparian vegetation, increased sediment, and lowering of water tables.

Wildlife

Livestock grazing has the potential to create unsatisfactory habitat conditions for MIS species, or impede successful restoration of habitat capable of becoming satisfactory habitat to support MIS species, such as sage grouse, northern goshawk, and mule deer.

Sage grouse, identified as a MIS in the Forest Plan, inhabit the majority of the project area. Livestock grazing has the potential to affect sage grouse habitat, including leks and nesting areas. Lek and nesting areas are a critical component of sage grouse habitat. The nesting areas generally occur within 2 miles of the leks. Disturbance to the nests could result in reduced hatches.

Livestock grazing may alter the vegetation composition of an area or reduce the availability of hiding cover. This may result in impacts to the quality of forage available or result in sage grouse being more vulnerable to predators. Livestock may also trample nests.

Issue 4: Vegetation

Livestock grazing has the potential to affect the composition, structure, and health of the various vegetative communities in the project area. These vegetative communities include riparian areas, aspen, upland vegetation. Vegetation grazing also has the potential to introduce and/or expand noxious weed infestations within these vegetative communities.

Issue 5: Socio-economic Values

Livestock grazing within the Martin Basin Rangeland Project area provides an economic value to grazing permittees, which in turn contributes to the social and economic stability of the surrounding community. Agriculture, including the ranching industry, has been a part of the community economic and social fabric since the establishment of Humboldt County. Changes in use on the allotments in the project area could affect the value ranching operations generate through grazing livestock on National Forest System lands, which could affect the local community.

ALTERNATIVES

The EIS considers three alternatives in detail: Current Management, Proposed Action/Preferred Alternative, and No Grazing/No Action.

Alternative 1 – Current Management

Under the Current Management Alternative (Alternative 1), current allotment management plans (AMPs) and Forest Plan proper use criteria would continue to guide livestock grazing management within the project area. The management systems, numbers of animals, and season of use would remain the same under this alternative. There are currently 5,305 cattle and 25

horses permitted within the project area (i.e., 20,639 head months (HMs) of cattle and 95 HMs of horses).

Alternative 2 – Proposed Action/Preferred Alternative

The Proposed Action/Preferred Alternative (Alternative 2) relies on the ecological condition of the rangelands to set and make adjustments to grazing use and grazing practices and strategies. By looking at the rangeland resource as a whole, this alternative would protect the natural resources and fish and wildlife habitat of the Forest, while providing a sustainable rangeland resource for domestic livestock grazing. The objective of the alternative is to manage grazing on National Forest System lands to provide an economic value to permittees while protecting essential ecosystem functions and values.

Alternative 2 would set proper use criteria (for this project, utilization) for habitat groups based on three possible ecological conditions (functioning, functioning-at-risk, and non-functioning). A two stage monitoring plan would be used to ensure that the proper use criteria are being adhered to and that the ecosystem is responding as expected. Predetermined modifications would allow us to change management in response to unanticipated or changed conditions on the ground and to make these changes in a way that is predictable and transparent to the permittee and interested members of the public.

Alternative 2 (Proposed Action) would do the following:

- ✓ Reauthorize grazing on the eight allotments in the project area.
- ✓ Use proper use criteria for each allotment to determine when livestock must be removed. The proper use criteria are based on the current ecological condition for each habitat group within each allotment or pasture within the allotment.
- ✓ Apply design features to minimize the impacts or potential impacts of grazing and associated activities.
- ✓ Conduct short-term and long-term monitoring to determine if adjustments to grazing are necessary.
- ✓ Adjust proper use criteria based on the long-term monitoring.
- ✓ Update allotment management plans to include the above items and key areas and benchmarks for monitoring compliance with proper use criteria.
- ✓ Authorize grazing on private lands within the boundary of the Santa Rosa Ranger District that have been or are proposed to be purchased by the Forest Service. These lands have been considered during this analysis and include, but are not limited to, the recently purchased Nevada First properties and the Rebel Creek properties.

Alternative 3 – No Grazing/No Action

The No Grazing/No Action Alternative (Alternative 3) would eliminate grazing on all allotments within the Martin Basin Rangeland Project area. This alternative would result in an immediate reduction of 5,305 cattle and 25 horses. This amounts to a combined total of 20,639 HMs. Existing improvements that are no longer functional or needed including interior fences, cattleguards, and water developments would be removed.

ENVIRONMENTAL CONSEQUENCES

The primary consequences of the alternatives are outlined in the following table.

Table S-1. Comparison of Alternatives described in the FEIS.

COMPARISON OF ALTERNATIVES – EFFECTS OF IMPLEMENTATION			
Resource	Alternative 1 Current Management	Alternative 2 Proposed Action/ Preferred Alternative	Alternative 3 No Grazing/No Action
ISSUE 1: WATER QUALITY			
Bacteria (Fecal Coliform)	Continues at historic levels or increases.	Levels decrease as numbers are reduced or vegetative buffer increases.	Levels decrease quickly.
Sediment/Turbidity	Continues at historic levels or increases.	Levels decrease as ecological condition improves and banks stabilize.	Levels decrease as ecological condition improves and banks stabilize. Occurs at a faster rate than Alternative 2.
Water Temperature	Continues at historic levels or increases.	Levels decrease as ecological condition improves and riparian communities recolonize stream banks.	Levels decrease as ecological condition improves and riparian communities recolonize stream banks. Occurs at a faster rate than Alternative 2.
Dissolved Oxygen	Continues at historic levels or increases.	Levels improve as nutrient levels and water temperature decline.	Levels improve as nutrient levels and water temperature decline. Occurs at a faster rate than the Proposed.
Nutrients (Nitrate and Phosphate)	In areas of concentrated use continues at historic levels or increases.	In areas of concentrated use continues at decreased level as vegetative buffer improves and/or numbers are reduced.	Inputs from grazing no longer exist shortly after grazing ceases.
ISSUE 2: SOIL QUALITY			
Ground Cover	Loss of ground cover continues at its current rate or increases.	Ground cover improves or stabilizes.	Ground cover increases as ecological condition improves. Occurs at a faster rate than Alternative 2.
Compaction	Levels of compaction continue at its current rate or increases.	Levels of compaction stabilized or reduced.	Levels of compaction reduce as ecological condition improves. Occurs at a faster rate than the Proposed Action.

COMPARISON OF ALTERNATIVES – EFFECTS OF IMPLEMENTATION			
Resource	Alternative 1 Current Management	Alternative 2 Proposed Action/ Preferred Alternative	Alternative 3 No Grazing/No Action
Erosion	Levels of soil erosion continue at its current rate.	Levels of soil erosion stabilized or reduced.	Levels of compaction reduce as ecological condition improves. Occurs at a faster rate than Alternative 2.
ISSUE 3: FISHERIES AND WILDLIFE			
Bank Stability	Below 80%.	Greater than 80%.	Between 80-90%.
Fisheries Populations	45-69% of potential population.	Increase in % population in relationship to potential populations.	Greatest increase in % population in relationship to potential populations.
Sage Grouse Nesting Habitat	Habitat in less than satisfactory condition is unlikely to improve. Potential for nest trampling in concentrated use areas.	Habitat in less than satisfactory condition would move towards satisfactory condition. Potential for nest trampling in concentrated use areas.	Habitat in less than satisfactory condition would move towards satisfactory condition more quickly than Alternative 2. Livestock would not be present to trample nests.
Sage Grouse Brood Rearing Habitat	Habitat in less than satisfactory condition would not improve.	Habitat in less than satisfactory condition would move towards satisfactory condition.	Habitat in less than satisfactory condition would move towards satisfactory condition more quickly than Alternative 2.
ISSUE 4: VEGETATION RESOURCES			
Riparian Health	Downward to stable trend.	Upward trend.	Increase in trend after livestock removed and then potential for slight downward trend.
Riparian – Percent Bare Ground	Percent bare ground increases in area with 65% use.	Decrease in percent of bare ground in all streams.	Greatest decrease in percent bare ground.
Aspen Regeneration	Stable to upward trend in large stands..	Increased improvement from Alternative 1 especially in small stands functioning-at-risk.	Most increase in rate of regeneration.
Upland Vegetative Composition	Percentage of native, desirable species would continue in its current trend or decrease.	Percentage of native, desirable species would stabilized or improved. As the condition improves, plant communities would be more resistant to invasive and noxious weeds.	Vegetative composition increases as ecological condition improves. Occurs at a faster rate than Alternative 2.

COMPARISON OF ALTERNATIVES – EFFECTS OF IMPLEMENTATION			
Resource	Alternative 1 Current Management	Alternative 2 Proposed Action/ Preferred Alternative	Alternative 3 No Grazing/No Action
Upland – Percent Bare Ground	Percent of bare ground increases in areas with 65% use.	Percent of bare ground stabilized or reduced.	Percent bare soil decreases as ecological condition improves. Occurs at a faster rate than Alternative 2.
Noxious Weeds – Trend in Number of Acres Affected	Current grazing standards would continue, where livestock act as a vector for spreading noxious weeds. Current pasture function would not likely change, therefore native plant communities and bare ground remain susceptible to noxious weed invasion.	Livestock would continue to act as a vector for spreading noxious weeds. Under this alternative, bare ground would be reduced and the native plant community health would improve, reducing the susceptibility of the area to noxious weed invasion.	Livestock would not cause or spread noxious weed infestations. Bare ground would be reduced and native plant community health would improve, reducing the susceptibility of the area to noxious weed invasion.
ISSUE 5: SOCIAL-ECONOMIC VALUES			
Permitted Animal Unit Months (AUMs) Gain or Loss	No change in AUMs.	Possible loss of AUMs due to reduced utilization levels.	Loss of all (27,258) AUMs.

Forest Service’s Preferred Alternative

Alternative 2 (The Proposed Action) is the Forest Service’s preferred alternative. This alternative allows for continued livestock grazing under updated management direction that should maintain or lead to sustainable, functioning ecological conditions on our rangelands.

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