

Appendix #2

MASSACRE PMU

Existing BLM Decisions

Cowhead/Massacre Planning Unit (northern portion)

General Decision #3: Ensure that moderate use (40% to 60%) is the upper limit for livestock use for major use areas on the native range. For specific areas within subunits 2 and 3, such as critical mountain brush types, light use will be the upper limit for livestock use.

General Decision #4: Do not allow livestock salting on springs, meadows, streams, and aspen areas.

General Decision #5: Fence meadows and aspen stands which contain significant wildlife values, such as sage grouse, and provide water outside the fences for livestock, wildlife, and wild horses. Allow prescribed grazing on these areas to maintain vegetative vigor and diversity. Provide at least one growing season of rest every two years.

General Decision #6: Encourage free use or commercial permits within Subunits 2, 3, and 4 to meet local demand for fence posts, poles, and fuel wood.

General Decision #13: Allow miscellaneous rights-of-ways within Subunits 2, 3, and 4, consistent with environmental concerns, as needs are identified by local government, citizen groups, and individuals.

General Decision #15: Utilize fire as a range betterment tool.

General Decision #16: Range Improvement Development

A. Water Developments

1. Fence and design with a buffer brush strip around the perimeter, those perennial reservoirs which have the potential for wetland development. Provide water outside the fenced areas.
2. Unless precluded by topography, fence springs as well as the meadows around the springs. Leave some water from each spring at the spring source and at the ground level for wildlife, and locate watering troughs far enough from riparian habitat to prevent trampling.
3. Provide water from selected wells for wildlife and wild horses during years when acres are rested from livestock grazing.
4. Provide a rock ramp in all water tanks to allow wildlife to safely use water tanks without risk of drowning.

B. Fencing

1. Keep fencing to the absolute minimum needed to complete the required job.

C. Land Treatments

1. All Areas
 - (b) Sage Grouse: Leave 100-yard buffer zones around meadows and along drainages.

- (d) Other: Rest land treatment areas from livestock grazing until the area manager determines that the desired plant response is achieved.
- 2. Area A (Massacre Mountain (High Rock Canyon) Allotment)
- 3. Area B (Massacre Mountain (Mountain and Grassy), Wall Canyon East, Massacre Lakes, Nut Mountain, Sand Creek (49 Seeding) Allotments)
 - (a) Big Game: (2) allow spraying only in early spring to avoid killing bitterbrush on deer winter range; (3) ensure that treatment areas have leave areas of 20% to 40% of the total area.
 - (b) Sage Grouse: Ensure that all land treatments adhere to Nevada Department of Wildlife, "Guidelines for Vegetal Control Programs in Sage Grouse Habitats in Nevada (1969, revised 1972)."
 - (c) Allow land treatments (spraying or burning) on sites with high productive potential, which do not respond to grazing management within a reasonable time.
- 4. Area C (Nut Mountain (Cavalry Camp Seeding), Massacre Mountain (Massacre Bench and Ranch), Bull Creek Allotments)
 - (a) Big Game: (1) ensure that treatment areas have leave areas of 10% to 20% of the total area.
 - (b) Sage Grouse: Ensure that all land treatments adhere to Nevada Department of Wildlife, "Guidelines for Vegetal Control Programs in Sage Grouse Habitats in Nevada (1969, revised 1972)." Strutting areas of marginal importance may be considered for land treatment on a case-by-case basis. Their importance will be evaluated by State Fish and Game and BLM wildlife biologists.
 - (c) Allow land treatments (spraying or burning) on areas which will not otherwise respond to grazing management within a reasonable time.
- 5. Area D (Massacre Mountain (Dogleg) and Long Valley Allotments)
 - (b) Sage Grouse: Evaluate on a case-by-case basis. Areas within two miles of strutting grounds which do not meet nest habitat requirements may be treated.
 - (c) Design vegetative manipulation projects to provide maximum livestock forage.

General Decision #17: Allow predator control pursuant to the Susanville District Animal Damage Control Plan. Direct control towards the specific predators causing the damage rather than the general predator population.

Subunits:

I. High Rock Canyon (Subunit #1)

Subunit #1, Decision #4: Allow for a change in the class of livestock from sheep to cattle in the entire Subunit. Allow livestock to graze west of High Rock Canyon and north of Little High Rock Canyon.

Allow cattle to graze in the canyon bottoms and east of High Rock on a prescriptive basis only. (Grazing will be scheduled when it provides a benefit to other resource values. This area will not be grazed on an annual or regular basis).

High Rock Canyon (41,400 acres)

It has not been determined that grazing would provide a benefit to other resource values. Therefore, grazing has not been authorized in the canyon bottoms and east of High Rock.

Subunit #1, Decision #6: Manage all ecological sites within Subunit 1 to achieve site potential.

Subunit #1, Decision #7: Establish the High Rock (Wild Horse) Herd Management Area (HMA) and manage for 70 to 100 wild horses, as long as monitoring shows that horses are not causing significant impacts on cultural resources with National Register qualities.

High Rock Wild Horse HMA (94,600 acres)

Current Appropriate Management Level (AML): 78 to 120 wild horses

Current Population Estimate: 227 wild horses

Next gather planned for fall of 2004.

Subunit #1, Decision #8: Do not allow bulldozers or other mechanized surface vehicles for fire control unless there is significant risk to human life, wildlife habitat, or livestock.

Subunit #1, Decision #9: Allow vehicular traffic in High Rock Canyon and (2 other designated routes). Close all other routes of travel.

Subunit #1, Decision #10: Prohibit vehicular travel through High Rock Canyon during the courtship and incubation period of raptors (February 15 to March 31) and during or following periods of wet weather.

Subunit #1, Decision #11: Initiate a mineral withdrawal for the High Rock Area of Critical Environmental Concern to protect it from future mineral development. Obtain private mineral rights in High Rock Canyon whenever possible.

Subunit #1, Decision #12: Do not allow construction of any major utility or transportation facility within Subunit 1.

Subunit #1, Decision #13: Acquire all private lands within Subunit 1.

II. Massacre-Nut Mountain (Subunit #2)

Subunit #2, Decision #1: Designate the following allotments for intensive livestock grazing management:

Massacre Lakes

Rangeland Health Assessment: 1999

All Standards met, or progress being made toward meeting.

Allotment Management Plan: 1982

Objectives

1. Improve forage quality and quantity on the native rangelands and sprayed areas.
2. Increase stand density of Thurber's needlegrass from 5 to 15 percent.

Grazing System

Sand Springs Spray/Release Pasture (6,783 acres) – Annual use in July and August, up to 60% use.

Monitoring

Types of monitoring are outlined in the AMP.

Evaluation and Modification

An evaluation was started on the Massacre Lakes Allotment in 1988, but it was never completed, and the AMP has not been officially modified since 1982. Preliminary results from the evaluation indicated that the objective to increase stand density of Thurber's needlegrass from 5 to 15 percent was not achieved due to poor livestock distribution and deviations from the planned grazing system (extended annual use during the growing season). The Sand Springs Pasture is now being used for up to 60 days during the growing season, then it is rested the following year.

Nut Mountain

Rangeland Health Assessment: 1999

All Standards met, or progress being made toward meeting.

Allotment Management Plan: 1983

Objectives

1. Improve livestock distribution through the development of additional livestock water.
2. Maintain bitterbrush in a fair or better condition based on form class.
3. Defer grazing on the mountain area until June 15, annually.
4. Maintain the permittees present active preference for the short term. Improve range condition to the point that the permittees total preference can be authorized for use.

Grazing System

Cavalry Camp Seeding (4,394 acres) – Alternate rest and early use (60 days)

Mountain Pasture (40,227 acres) – Alternate mid season (July) and late season (September) use, 60 days annually.

Flexibility

1. The initial dates and use periods indicated on the grazing system are the objective of this plan. Some annual modifications may be necessary to prevent over utilization of an area.
2. April 16 is the anticipated date for range readiness in the allotment. This date could vary by as much as +/- 10 days, dependent upon annual weather conditions as determined by the Authorized Officer.

3. Approximately 85% of the cattle should be removed from the allotment by October 15. Ten days will be allowed to gather the remaining cattle.

Monitoring

Types of monitoring are outlined in the AMP.

Wall Canyon East (40,754 acres)

Rangeland Health Assessment: 2000

Not meeting Stream Health, Riparian/Wetland, Biodiversity Standards.
Decision in place to address.

Allotment Management Plan: 2001

Objectives

1. Manage for riparian/willow communities so they will be at or near potential natural community (PNC).
2. Retain at least 75% of the existing bitterbrush communities. Achieve a form class of 2.25 or less.
3. Restore Valley Bottom range sites in order to achieve site potential.
4. Retain Mountain Big Sagebrush communities by treating no more than 15% of Mountain Big Sagebrush sites every five (5) years.
5. Retain Wyoming Sagebrush communities by treating no more than 10% of Wyoming Sagebrush sites every ten (10) years.

Terms and Conditions

1. All grazing use would be in accordance with the revised allotment management plan.
2. Light use (20-40%) would be the upper limit of utilization allowed on herbaceous and browse species.
3. Herding would be required to limit cattle use on the riparian areas associated with Wall Canyon Creek and Cottonwood Creek. A four-inch (4") minimum stubble height left remaining at the end of the grazing season would be required.
4. Salt would be placed no closer than 1/4 mile from any water source.

Grazing System

The AMP implements a four-use area, deferred rest rotational system, utilizing herding. The two southern use areas would alternate between short duration early use and rest. The two northern use areas would alternate between mid season (June/July) and late season (August/September) use for 45 to 60 days.

Massacre Mountain

Rangeland Health Assessment:

Scheduled for 2003.

Black Rock Desert/High Rock Canyon National Conservation Area (NCA)

Entire allotment is within the NCA. Planning level decision expected in 2004. Allotment Management Plan and activity level planning to follow. In the interim, the allotment is subject to the Cowhead/Massacre Land Use Plan general and Subunit 2 decisions, as implemented through annual operating plans.

Annual Operating Plan: 2002

Grazing System

Dogleg (9,327 acres) – Use early (April/May) for 30 days, late (August) for 2 weeks.

Little High Rock (24,127 acres) – Use early (May/June) for about 30 days.

Mountain (70,139 acres) – includes several “use areas”, as follows:

Yellow Rock – Use mid (June) for about 30 days.

Grassy Table – Use late (July) for about 30 days.

South Massacre Mountain – Use late (July/August) for about 30 days.

Massacre Bench and Mud Springs (1,079 acres) – Use early/mid (April-July) for 90 days.

North Massacre Mountain – Use late (July-September) for 60 days.

Massacre Ranch (462 acres) – Use late (September/October) for 2 weeks (gather area).

Pole Corral (77 acres) and Stevens Camp (154 acres) – Excluded from livestock use.

Flexibility/Management Requirements

1. Adjustments to the scheduled use will be made when weather, water, or forage situations dictates a move, with the permittees agreement and the BLM’s authorization.
2. Movement between pastures/use areas may vary up to 15 days, plus or minus, depending on range conditions and utilization levels.
3. The livestock operators are responsible for moving livestock in a timely manner.
4. Salt and other mineral supplements will be placed a minimum of ¼ mile (preferably a ½ mile) away from streams (perennial and intermittent), springs, seeps, aspen stands, meadows, and archaeological sites.
5. No motorized vehicles will be allowed within the newly designated Wilderness Areas, unless there is prior written authorization from the Surprise Field Office Manager.

Subunit #2, Decision #5: Manage the ecological sites for mid-successional vegetative conditions (50 to 75 percent of ecological climax).

Subunit #2, Decision #6: Establish moderate use on grasses and light utilization on bitterbrush as the upper limits for livestock use in Subunit 2.

Subunit #2, Decision #11: Acquire lands near Massacre Lakes and in Hanging Rock Canyon, whenever possible.

Subunit #2, Decision #14: Treat approximately 6,500 acres suitable for brush control and seeding to be utilized for spring and summer livestock forage (includes Cavalry Camp Seeding).

Subunit #2, Decision #15: Establish the (Massacre Lakes), Nut Mountain, (High Rock Canyon), and Wall Canyon Wild Horse Herd Management Areas.

Nut Mountain Wild Horse HMA (40,200 acres)

Current Appropriate Management Level (AML): 30 to 55 wild horses

Current Population Estimate: 87 wild horses

Next gather planned for fall of 2004.

Wall Canyon Wild Horse HMA (41,100 acres)

Current Appropriate Management Level (AML): 15 to 25 wild horses

Current Population Estimate: 40 wild horses

Next gather planned for fall of 2004.

Subunit #2, Decision #16: Leave Subunit 2 open to ORV travel.

III. Long Valley-Sand Creek (Subunit #3)

Subunit #3, Decision #1: Designate the following allotments for intensive livestock grazing management:

Long Valley

Rangeland Health Assessment: 1998

All Standards met.

Allotment Management Plan: 1983

Objectives

1. Create additional forage in the allotment by removing sagebrush and seeding to crested wheatgrass on about 10,000 acres. (Completed in the form of the Black Hills and Lone Spring Seedings)
2. Wheatgrass seedings will be used for early turnout (May 1 – July 31). Heavy utilization will be the upper limit of use on seedings.
3. Turnout on native range will be August 1 +/- 15 days depending on the seed ripe date for the key native species.
4. Moderate utilization will be the objective for maximum use on native range.

Grazing System

Black Hills seeding (6,321 acres) and Lone Spring Seeding (5,627 acres) – Alternate rest and up to 90 days use early (May to July). Maximum of heavy use (80%).

Mountain (11,577 acres) – Up to 75 days use late (July to September), annually.

Valley Bottom (6,860 acres) – Up to 45 days use late (August/September), annually.

Monitoring

Types of monitoring are outlined in the AMP.

Sand Creek

Rangeland Health Assessment: 1999

All Standards met, or progress being made toward meeting.

Allotment Management Plan: 1984

Objectives

1. Improve and maintain the major vegetative sites by increasing the percent composition, cover, and frequency of the key perennial grass species in the allotment.

The remaining objectives apply to areas of the allotment, which are outside of the Massacre PMU.

Grazing System

Lowlands (1,000 acres) – Up to 60 days early use (April/May), annually.

49 Seeding (6,321 acres) – Alternate rest and up to 90 days early/mid season use (May/June/July).

Flexibility

The dates specified for the management of vegetation in each of the use areas are approximate and will fluctuate based on annual precipitation and temperatures. Therefore, movements of cattle will vary annually.

Monitoring

Types of monitoring are outlined in the AMP.

Bull Creek

Rangeland Health Assessment: 2000

Not meeting Stream Health, Riparian/Wetland, and Biodiversity Standards.

Current livestock grazing is primary factor in not meeting Standards in the Willow Creek drainage.

Guideline implemented:

#16 – A 4-6 inch minimum stubble height will remain at the end of the growing season in most riparian areas.

Willow Creek Decision: 2002

Fence Willow Creek system into an enclosure/riparian pasture. Rangeland Health Guideline #16 will continue to be implemented until pasture development is complete (expected in 2003 or 2004, depending upon funding).

Allotment Management Plan: 1984

Objectives

1. Improve and maintain the major vegetative sites by increasing the percent composition, cover, and frequency of the key perennial grass species in the allotment.
2. Enhance riparian values along Willow Creek.
3. Increase the productivity of degraded big sagebrush/bunchgrass sites in the allotment through brush removal.
4. Maintain browse species in a healthy form class for deer and antelope.

Grazing System

The grazing system outlined in the AMP has not been implemented. It required fencing the west side of the allotment into two pastures, and splitting the east side of the allotment into two pastures. Due to uneven forage and water distribution, these fences were never constructed.

Annual Operating Plans

Currently, the allotment consists of three pastures, including the Lower Pasture (13,335 acres) on the west side of the allotment, the Button Brush Pasture (5,473 acres) on the east side of the allotment, and the Bull Springs Pasture (20,658 acres) in the center of the allotment. Water development has been attempted in the south half of the Bull Springs Pasture, with little success. Only the north half of the Bull Springs Pasture is suitable for late season livestock use, and livestock use is concentrated in this area in the late summer/fall every year. Management has been adjusted annually in an attempt to improve livestock distribution on the allotment.

Livestock operator change will occur in 2003 (new leasee). Currently working with the base property owner and prospective leasees to develop a livestock grazing system that will meet the Land Use Plan and AMP objectives. Winter/spring grazing is being considered. Decision is expected in 2003, implementation in 2004.

Subunit #3, Decision #3: Manage the majority of the native range in the Long Valley (and North Larkspur) Allotments to meet the physiological needs of Great Basin wildrye.

Subunit #3, Decision #4: Manage the (Horse Lake, Little Basin, Calcutta), Sand Creek, and Bull Creek Allotments to reach 50 to 75 percent of site potential. Provide at least one growing season of rest every two years on native range.

Subunit #3, Decision #8: Treat approximately 21,000 acres suitable for brush control and seeding (includes Long Valley seedings).

Subunit #3, Decision #11: Leave Subunit 3 open to ORV travel.

Subunit #3, Decision #12: Encourage geothermal and oil and gas exploration and development.

Subunit #3, Decision #13: Encourage communication development on Forty-nine Mountain to satisfy communication needs before developing additional sites.

Tuledad/Home Camp Planning Unit (southern portion)

Range Management Objective #1: Manage land, which is suitable of livestock grazing in such a manner that within 20 years all plant communities are on an upward trend toward site potential.

Range Management Objective #4: Increase canopy cover of rushes, sedges, and grasses to 90 to 100 percent within six years on all wet meadows and riparian communities.

Range Management Objective #5: Demonstrate a statistically significant increase in perennial grass basal cover within 12 years on study plots located in each pasture.

Range Management Objective #6: Demonstrate a statistically significant increase in vegetative cover (litter included) within six years.

Range Management Objective #7: Maintain the Wall Canyon West Allotment seeding in a stable condition.

Range Management Decision #1: Initiate systematic livestock management plans on the following allotments. The initial stocking rates will not exceed the present active preference:

Home Camp

Rangeland Health Assessment: 2000

Not meeting Riparian/Wetland, Biodiversity Standards.
Decision in place to address

Allotment Management Plan: 2001

Objectives

1. Uplands

- § Maintain all upland sites in good to excellent condition.
- § Over time, restore the natural fire regime with the goal of restoring the native shrub to herbaceous vegetation ratio (landscape level objective).
- § Maintain palatable browse stands (bitterbrush, serviceberry, mountain mahogany, and snowberry) in satisfactory condition to maintain the vigor of the vegetation and to provide forage for wildlife species.

Loamy/Claypan Sites (*East of Nellie Mountain, South of Seedings, Ryegrass Trend Study Site, East of Boulder Reservoir*)

- § Maintain good ecologic condition on Gravelly Claypan and Loamy 8-10 range sites.
- § Improve Loamy sites (those in less than good-excellent condition presently) to achieve at or near site potential (high good ecologic condition) within 10-20 years, in order to provide suitable vegetation cover, composition, and structure to support nesting and over wintering sage grouse on the Loamy big sagebrush sites.
- § Maintain a high diversity of palatable forbs on the Claypan sites.
- § Maintain patches of big sagebrush adjacent to meadows and low sagebrush communities for hiding cover.

Crabapple and Antelope Seedings

On the deeper soil sites, restore vegetation for sage grouse and livestock through practices such as brush reduction and re-seeding with a diverse mix of native grasses and forbs.

Loamy Fan 8-10 Range Sites (Boulder Lake)

Manage sites to achieve fair condition on untreated sites, and fair-good condition on treated sites (Range Site 023XY097NV) within 20 years.

2. Riparian/Wetland Sites (Throughout allotment)

- § Achieve proper functioning condition on all systems within 5 years.
- § For perennial streams and springs/seeps, manage for communities dominated by stabilizing/colonizing vegetation within 5 years. On steeper gradient, coarse substrate soils, manage to encourage establishment of a diverse age class of woody riparian vegetation.
- § For ephemeral drainages, increase the water holding ability of existing floodplains by increasing the vigor, reproduction, and density of existing riparian vegetation to retain soil during spring run-off.

3. Aspen/Willow Sites (Primarily Mountain Pasture)

- § As a minimum, maintain the size and extent of existing aspen and willow stands.
- § Remove juniper where present.
- § Within ten years, expand aspen stand size and extent; establish a young age class that exceeds browse height.
- § Over the long term, achieve multi-layered canopies in which diverse age classes are represented.

4. Wildlife Habitat

- § Maintain or improve habitat conditions for mule deer, pronghorn antelope, sage grouse, bighorn sheep, and other game and non-game wildlife species.
- § Maintain or improve the upland and riparian conditions in the Mountain View Creek watershed to protect the downstream habitat conditions of the Wall Canyon Sucker.

5. Noxious/Invasive Weeds

- § Maintain the vigor, density, and diversity of native plant communities with the goal of preventing the new establishment or expansion of existing populations of noxious or invasive weeds.
- § Aggressively treat all known populations of noxious weeds.
- § Allow a minimum of two growing seasons of rest following all wild or prescribed fires. Consider intensive rehabilitation in areas that are vulnerable to cheatgrass or medusahead invasion.

Livestock Management Practices

- § Livestock will be managed according to the revised Allotment Management Plan. An Annual Operating Plan will be developed to guide annual livestock management.
- § Salt must be placed at least 1/4 mile away from any water source. A program of salting in

several locations and changing those locations periodically should be followed. Salt should be used to draw livestock away from riparian areas or areas of heavy use into areas of lighter use. To provide for optimum livestock distribution, avoid placing salt where you will get heavy use anyway as this can encourage overuse.

- § Range improvements must be maintained to standards *prior* to livestock turnout. See the Range Improvements section for a list of new and existing projects with maintenance responsibilities.
- § Livestock grazing is not permitted within meadow rehabilitation exclosures (including Little Indian Spring, Lower Indian Spring, Paso Spring, and Grass Lake) or within spring source exclosures. However, livestock use within specific exclosures may be prescribed in the Annual Operating Plan, if such use promotes meeting the objectives for each exclosure.

Livestock Grazing System

Boulder Mountain Pasture (32,450 acres): Annual deferred use, 45 to 60 days use (hot season).

Low Pastures (104,523 acres): Rotational early season/mid season/rest, 45 to 60 days use (cool season).

Seedings (7,400 acres): Annual early use, 30 days.

Contingency(s) in the Event of Drought

- § On a drought year (less than 70% of normal precipitation), operators will have the flexibility to use all three low-elevation pastures, thereby postponing rest for one pasture for one year.
- § Extended drought conditions will require assessing conditions on-the-ground to determine a management strategy which will protect plant vigor and other resource values.

Monitoring, Evaluation, and Adaptive Management

Criteria were outlined in the AMP.

Nolan Wild Fire Rehabilitation: 1990

Naturally started (lightning) wild fire, which burned 1,345 acres in the August of 1990.

Actions

Exclude livestock from the burned area for a minimum of two growing seasons by constructing 4.5 miles of electric fence and 1.5 miles of barbed wire fence.

Objectives

1. Establish 70% soil cover by live vegetative canopy and litter.
2. Maintain soil stability and productivity at acceptable levels, as defined by SCS allowable soil loss tolerance.
3. Maintain watershed conditions to prevent excessive peak flows.
4. Retard invasion of highly flammable plants (i.e. cheatgrass).
5. Restore livestock and wildlife habitat and forage.
6. Provide subsequent livestock management, which will assure sustained yield of the vegetative resource and quality watershed values.
7. Provide exclusion of livestock from the damaged aspen stands in order to facilitate stand regeneration.

Current Status

The solar electric fence was not effective because livestock and wildlife pushed through the fence continuously. The remains of the electric fence were removed in 1992. The barbed wire fence was fairly effective in keeping cattle out of the aspen stand for the first summer after the fire. The following summer, aspen snags left from the fire began to fall and breached the fence in many places. Cattle and wildlife entered and used the herbaceous understory of the burned aspen stand; however, aspen suckers have regenerated and have reached browse safe heights on the majority of the burned aspen areas. The barbed wire fence is currently scheduled for removal to restore the wilderness values of the site. Soil cover and stability were restored by the end of the second growing season after the fire. Cheatgrass is present throughout the burned area, but native perennial grasses are productive and dominant in most areas. Sprouting shrubs and sagebrush have re-established, and bitterbrush is beginning to re-establish within the burned areas. Current livestock management favors the perennial grass understory in the burn because the Boulder Mountain Pasture is used annually after seed ripe on grasses. However, the burned area is not well watered, and use on both grass and browse species is generally light.

Buzz/Black Wild Fire Rehabilitation: 2001

Naturally started (lightning) wild fire, which burned 2,206 acres in August of 2001.

Objectives

1. Stabilize the soils within the burned areas by allowing the vegetation in the area to naturally re-establish from the existing root system and seedbank.
2. Protect soils and vegetation from livestock impacts so that plant communities can re-establish vigor, stability, ground cover, and diversity.
3. Restore plant communities to good condition to maintain habitat for bighorn sheep, pronghorn antelope, sage grouse, mule deer, and other game and non-game wildlife species.
4. Protect the cultural resources within the burned area from excessive trampling and accelerated erosion impacts.
5. Ensure that the burned area is capable of complying with the Rangeland Health Standards for Northeastern California and Northwestern Nevada that were approved in July of 2000. Refer to the April 1998 Rangeland Health Standards and Guidelines for California and Northwestern Nevada Environmental Impact Statement and the July 2000 Record of Decision for more information.

Livestock Management

Rest for minimum of 2 growing seasons, or until soil and vegetation objectives are met.

Mitigation Measures

1. All construction and travel on existing roads and along the fence line should take place when soils are dry.
2. Flag all new stretches of fence to reduce the risk of collision by wildlife.
3. Design fences to use as few rock jacks and juniper posts as possible.
4. Design fences to be passable by bighorn sheep, pronghorn antelope, and mule deer.
5. Remove as few juniper or large shrubs as possible during fence construction.
6. Do not allow cutting down of any tree with recent signs of wildlife use (e.g. nests).

Current Status

1. The temporary fence was constructed in spring of 2002.
2. The burned area was successfully rested during 2002 grazing season.
3. Herbaceous vegetation is recovering well, and soils are stabilized.
4. Sprouting shrubs (snowberry, rabbit brush, horse brush, etc.) are recovering and providing structure for wildlife habitat and water cycling.

Bare

Rangeland Health Assessment: 1999

All Standards met, or progress being made toward meeting.

Multiple Use Decision: 1999

Objectives

1. Maintain current amounts of litter cover on all upland trend transects to protect soils from accelerated wind and water erosion and to maintain soil health.
2. Ensure all upland trend sites are moving towards, or are being maintained at, mid seral to Potential Natural Community (PNC) for the appropriate Range Site Potentials (as described by NRCS).
3. Increase the diversity of seral stages in some of the big sagebrush and mountain brush communities on the higher elevations to improve wildlife habitat and to maintain progress towards Range Site Potential.
4. Increase the age class diversity of existing aspen stands, and increase the size and occurrence of aspen stands where the potential exists.
5. Maintain bitterbrush Form Class in the range of 1.25-2.5 to benefit both game and non-game species in all pastures.
6. At a minimum, manage for Properly Functioning Condition (PFC) on all riparian areas. Develop Desired Plant Community (DPC) descriptions for all key riparian areas; these DPC's should range from mid seral to Potential Natural Community (PNC).
7. Reduce accelerated erosion and compaction of soils in key riparian areas.
8. Little High Rock Canyon:
 - a. Maintain the primitive characteristics of the Little High Rock Canyon complex.
 - b. Preserve archaeological and historical sites.
 - c. Provide habitat for bighorn sheep, other game and non-game wildlife, and wild horses.
 - d. Maintain Little High Rock Creek in Properly Functioning Condition and moving towards PNC.
9. Manage livestock numbers to be within the carrying capacity of the allotment on a year with median to low precipitation and plant growth. Maintain a livestock grazing system that, 1) will allow both the upland and riparian objectives, and the Little High Rock Canyon objectives to be met, and 2) is economically feasible for the livestock operator to achieve.
10. Maintain the Fox-Hog Wild Horse herd within the Appropriate Management Level (AML) of 226 horses, to allow soil and vegetation management objectives, including riparian area objectives, to be met, and to maintain a viable herd.
11. Implement the Surprise Integrated Noxious Weed Management Area Memorandum of Understanding.

Conditions and Flexibility

1. Of the total 13,260 AUM's of Active Use, a maximum of 5,254 AUM's may be used between July 1 and October 31.
2. Duration of use on each key public riparian area will be limited to a maximum of 45 days during the cool season (November 1 to June 30), or 30 days during the hot season (July 1 to October 31). Pasture rotation and herding will be the primary tools to ensure duration of use does not exceed these amounts. Riparian area specific fencing of key riparian areas will be considered if pasture rotation and herding are insufficient in meeting resource objectives.
3. Maximum use on key riparian areas will be: (1) 60% of the current year's growth by July 1 (herbaceous vegetation), and/or (2) 40% of the current year's growth by October 31 (herbaceous and woody vegetation).
4. Maximum use of upland vegetation will be 60% of the current year's growth of key grasses and shrubs.
5. Following consultation with the BLM, the livestock operator may change the pasture rotation system during the grazing year to adapt to weather, water, and forage conditions. However, duration of use in riparian areas may not exceed 30 days during the hot season, and utilization criteria may not be exceeded.
6. The BLM may authorize livestock use that exceeds utilization criteria, only when it is determined that such use is necessary to meet vegetation or wildlife habitat objectives.
7. All salt placed on the Bare Allotment must be at least 3 miles from all water sources and natural riparian areas on public land.
8. The Bare Allotment livestock operator will be given first preference for use in Little High Rock Canyon if the BLM determines that prescriptive livestock grazing would benefit the vegetation or wildlife in the canyon.
9. The Fox Mountain Pasture may be used after July 15 no more than one year in three.

Livestock Grazing System (189,775 acres)

The existing eight fenced pastures will be maintained. An annual pasture rotation schedule will be developed by the BLM and the livestock operator prior to grazing use each year to meet the objectives for the allotment. This schedule will include, 1) turn-out and gather dates for each pasture, and 2) herding strategies for all pastures which are scheduled for more than 45 days of use in the cool season (November 1 to June 30) or 30 days of use in the hot season (July 1 to October 31).

The pasture rotation and herding schedule will emphasize periodic season-long rest and annual changes in season of use for each pasture/use area, while following natural livestock movement patterns (uphill in spring/summer, downhill in fall).

Project Development Needs

1. Prescribed fire may be used as a tool in 1) higher elevation, decadent big sagebrush and mountain brush communities, 2) Lower Cottonwood Creek and/or Lost Creek, and 3) non-regenerating aspen stands.
2. Small erosion control structures to halt head cutting in the drainages (as necessary, based on the findings of the RFA).
3. Short pipelines and limited water developments to remove troughs from the drainages/springs and onto the uplands.

Monitoring

Types and time frames were outlined in the Multiple Use Decision.

Cottonwood Wild Fire Rehabilitation Plan: 1988

Hunter caused wild fire which burned 628 acres in August of 1988.

Actions

Exclude livestock from the burned area for a minimum of two growing seasons by constructing 3.5 miles of electric fence.

Objectives

1. Establish 70% soil cover by live vegetative canopy and litter.
2. Maintain soil stability and productivity at acceptable levels, as defined by SCS allowable soil loss tolerance.
3. Maintain watershed conditions to prevent excessive peak flows.
4. Retard invasion of highly flammable plants (i.e. cheatgrass).
5. Restore livestock, wild horse, and wildlife habitat and forage.
6. Provide subsequent livestock management which will assure sustained yield of the vegetative resource and quality watershed values.

Current Status

Due to difficult terrain and wildlife/wild horse migratory routes, the temporary fence was never constructed. Soil cover and stability have been restored. Cheatgrass is not present in significant amounts, and sprouting shrubs and sagebrush have re-established within the burned area. The area is fairly close to water and currently receives moderate to heavy use by livestock and wild horses each year.

Wall Canyon West

Rangeland Health Assessment: 1999

All Standards met, or progress being made toward meeting.

Allotment Management Plan: 2001

Objectives

Wall Canyon Creek:

1. 80% streambank stability
2. 70-80% stream shade
3. Pool-to-riffle ratio between 40:60 and 60:40
4. Width-to-depth ratio appropriate for channel type
5. <15% fines in riffles and pool tails
6. 90% ground cover in surrounding streamside areas

Uplands:

1. Maintain condition of seeded pasture.

2. Utilization of key herbaceous species in uplands limited to 40-60% (moderate use).
3. Re-establishment/Maintenance of bitterbrush stand in West Pasture which was burned in 1996.
4. Maintain condition of bitterbrush stands in the East Pasture

Grazing System

East Pasture (15,100 acres) – To be used season-long 2 years, rested 1 year in three.

West Pasture (19,016 acres) – To be rested 2 years, used season-long 1 year in three. Livestock will be removed to seeding if 5% bank alteration on Big Springs or Wall Canyon Creek occurs.

Seeding (3,700 acres) – To be used annually for up to 30 days in April. May be used in August one year in three.

Utilization Criteria: Moderate Use (40-60%) on uplands, minimum 5" stubble remaining on riparian areas (on the greenline) at the end of grazing season. Cattle will be removed from the pasture or allotment when these thresholds are reached.

The system requires extensive herding during the hot season to keep livestock from congregating on riparian areas.

Monitoring

Types and time frames were outlined in the Management Plan Revision.

Corral Wild Fire Rehabilitation: 1997

Naturally started (lightning) wild fire, which burned 7,040 acres in August of 1996.

Actions

1. Repair allotment boundary fence
2. Exclude livestock from the West Pasture of the Wall Canyon West Allotment for a minimum of two growing seasons.
3. Herd livestock out of the burned areas in the Home Camp Allotment for a minimum of two growing seasons.

Objectives

1. Restore the herbaceous production to 80%, as compared to adjacent unburned areas, before allowing livestock use.
2. Once herbaceous production is restored, use livestock grazing to reduce perennial grass competition with seedling browse (bitterbrush and mountain mahogany) plants by prescribing livestock use during the upland grass-growing season.

Current Status

Herbaceous production was restored by the end of the second growing season after the fire. Due to concerns for the conditions along Wall Canyon Creek, livestock use has rarely been prescribed in the West Pasture of the Wall Canyon West Allotment during the growing season of grasses. The current grazing system is to use the West Pasture from April to August, one year in three. Sprouting shrubs have re-established within the burned areas. There are some islands of unburned

bitterbrush and sagebrush. Bitterbrush is beginning to re-establish in the burned areas adjacent to unburned islands and in areas, which burned cooler. Sagebrush is re-establishing throughout the burned area.

Duck Lake (64,934 acres)

Rangeland Health Assessment: 2000

Not meeting Stream Health, Riparian/Wetland, (Riparian) Biodiversity Standards.
Current livestock management is primary factor in not meeting the standards.

Guidelines implemented:

#2 - Desired seral states will be determined through the Allotment Management Plan development process; generally the goal will be to achieve advanced ecological status in the riparian zone.

#16 - A, 4-6 inch minimum stubble height will remain at the end of the growing season in most riparian areas.

Interim Decision: 2001

Herding used to address riparian area resource conflicts.
Implementation was unsuccessful.

Annual Operating Plan: 2002

Hot season of use shortened by 75 days (cancelled 55 head straggler use permit).
Rangeland Health Guideline #16 implemented (40% maximum use on key riparian areas).

Livestock operator change will occur in 2003 (new leasee). Currently working with the base property owner and prospective leasees to develop a livestock grazing system that will make progress towards meeting Standards. Potential alternatives being considered include winter grazing and extensive riparian pasture fencing. Decision is expected in 2003, implementation in 2004.

Lower Lake

Rangeland Health Assessment:

Scheduled for 2004.

Allotment Management Plan: 1985

Objectives

1. In the short term, provide livestock forage to satisfy the livestock operator's current active use and current season of use. In the long term, provide livestock forage to satisfy the livestock operator's Class I Demand.
2. Maintain the condition of key grass species (bottlebrush squirreltail) in the pastures as described by analysis of condition plot #40-17-23.

Grazing System

Middle Field – To be used each year approximately March 1 to April 30 as an early turnout field for the purpose of livestock management to prevent scours in cow/calf pairs.

North Pasture (5,935 acres) and South Pasture (3,160 acres) – To be grazed on alternate years from April 16 until July 15. These pastures are subject to moderate use utilization levels (60% maximum use of key species). When moderate use is attained, livestock shall be removed.

Expanded Flexibility

1. The grazing system described above shall serve as a basis for grazing management on this Allotment. However, the livestock permittee has the option of adjusting this grazing system by either changing sequence of pasture use and/or changing periods or length of time in each pasture (which) will be used during the grazing season. These adjustments must comply with the moderate use limitations of the native pastures.
2. The normal grazing season of use on native pastures is April 16 to July 15. The permittee has the option to extend either end of the grazing season by as much as 30 days, provided the total use for any single grazing year does not exceed more than 15% of the active AUM's or 658 AUM's total.
3. The livestock permittee(s) has the option to exceed recommended stocking levels if he determines the forage is available. Increased numbers may not exceed more than 15% of the active AUM's being used or exceed a total use of 658 AUM's in a grazing season.
4. The livestock operator may make all adjustments in grazing use without prior approval or notification to BLM, however, all grazing use made will be documented on the annual Actual Use Report. All management adjustments should be made in a manner that will meet the objectives for this Allotment.

Monitoring

Types and time frames were outlined in the AMP.

Annual Operating Plan: 2002

Grazing System

Middle Field – March/April in conjunction with private lands

North Pasture – April 15 to May 15, if water is available

South Pasture – May 1 to July 15

Denio

Rangeland Health Assessment:

Scheduled for 2003.

Allotment Management Plan: 1987

Objectives

1. Initiate vegetative recovery on sites presently producing less than full potential such that:
 - a. Within six years canopy cover on wet meadows is greater than 90%.
 - b. Within six years of implementation, total vegetal cover (including litter) increases significantly in the lower pastures.
 - c. Within 12 years, perennial grass basal cover increases significantly in the lower pastures and is maintained in the upper pastures.
 - d. Surface erosion is decreased to or maintained at less than two tons/acre/year as measured by the Modified Universal Soil Loss Equation.
2. Leave palatable browse species (bitterbrush, mountain mahogany) in satisfactory condition for both game and non-game species in the upper pasture.
3. Improve big game habitat to the point where it could sustain a population of 105 deer.
4. In the short term, provide livestock forage to satisfy the livestock operator's current active use and season of use.
5. Provide brooding habitat for sage grouse in the lower pastures.

Grazing System

The allotment is being managed under an Interim Grazing System until required water developments and division fencing are completed in the South Pasture.

South Pasture (12,410 acres) – Used early, annually for 45 days or until moderate use (40-60%) is achieved.

North Pasture (12,102 acres) – Used late, annually for up to 135 days or until moderate use (40-60%) is achieved, at which time cattle are to leave the allotment.

Flexibility

Deviations to the grazing schedule may occur if climatic, vegetative, or water conditions warrant.

Monitoring

Types and time frames were outlined in the AMP.

Range Management Decision #2: The following allotments will be managed at a custodial level:

Corral – Managed in conjunction with the Home Camp Allotment.
(Highway)

Range Management Decision #4: Terminate livestock grazing on the Bicondoa Allotment. Reintroduce and manage range for bighorn sheep.

Bicondoa Allotment (3,800 acres)

Rangeland Health Assessment: 2000

All Standards met on portions of the allotment within the Massacre PMU.

Upper elevations unallotted to livestock grazing. Bighorn sheep reintroduced and water developed (guzzler).

Range Management Decision #5: Consider large-scale cultural treatments after an environmental assessment has been prepared for sites identified as having the potential for successful treatment (EAR #CA-02-79-22).

Range Management Decision #6: Forage increases should be first allocated to meet wildlife habitat objectives or other multiple use objectives. Subsequent forage increases should be allocated to meet Class I Demands of the permittees.

Wildlife Objective #4: Maintain and improve existing raptor nesting habitat and expand nesting range by 25% by 1985.

Wildlife Objective #6: Achieve maximum reproduction, survival, and growth of riparian vegetation on 75% of this vegetative type within 10 years.

Wildlife Objective #7: Maintain at least 20% of each native vegetative type in a natural or near natural condition and improve non-game bird habitat on all range improvement projects.

Wildlife Objective #9: Improve 75% of sage grouse habitat during the next 15 years.

Wildlife Decision #6: Exclude vegetative manipulations within a three-mile radius of any eagle, peregrine falcon, or prairie falcon eyrie. Exclude recreational development and vegetative manipulation within Hays Canyon and Wall Canyon.

Wildlife Decision #7: Grazing management systems should be designed to improve riparian vegetation on streams throughout the unit. Fence streams where management is unable to improve riparian habitat.

Wildlife Decision #8: Provide year-round water, at ground level for wildlife on all livestock water developments. Determine needs and suitability for wells on a case-by-case basis consistent with District Range Improvement and Maintenance Policy Statement.

Wildlife Decision #9: Prohibit all vegetation manipulation within two miles of sage grouse strutting areas and within 100 yards of any meadow or stream.

Wild Horse Objective #1: Protect and manage wild free-roaming horses and burros as components of the public land in a manner to achieve ecological balance with other uses.

Wild Horse Decision #1: Manage and protect a viable, self-sustaining horse population. Develop Herd Management Activity Plans for each herd management area.

Fox-Hog Wild Horse HMA (97,000 acres)

Current Appropriate Management Level (AML): 120 to 226 wild horses

Current Population Estimate: 480 wild horses

Next gather planned for fall of 2004

Wild Horse Decision #2: Consider horse use areas when fencing.

Minerals Decision #1: Allow (mineral) exploration consistent with the protection of other resource values.

Forestry Objective #1: Manage the juniper woodlands for maximum production of wood products, including firewood, fence materials, and chips.

Forestry Decision #1: Allow for utilization of juniper and mahogany for firewood, posts, poles, and chips consistent with site potential.

Recreation Objective #5: Maintain undeveloped, primitive character of the Planning Area.

Recreation Decision #1: Do not develop campgrounds or scenic overlooks. Identify sites as overlooks only through signing.

Lands Decision #1: Develop Fox Mountain communication site to its maximum capacity before utilizing Hays Peak, and then develop Little Hat Mountain as a last resort. Develop Mahogany Mountain by installing a small repeater site powered by solar panels. Construction methods must minimize all environmental impacts.

Lands Decision #2: Consider exchanging scattered parcels near deeded lands to allow agricultural development.

Lands Decision #3: Designate three utility corridors: a) along the existing 750 KV DC line; b) east from Surprise Valley through 49 Pass, then south along existing corridor; and c) southeast along Highway 81 and then east-west.

Other Decisions/Policy impacting sage grouse habitat:

Rangeland Health Standards and Guidelines for California and Northwestern Nevada, April 1998.

Integrated Weed Management on Bureau of Land Management Lands, Eagle Lake and Surprise Resource Areas in Nevada. EA #CA-370-97-19, specifically including the Proposed Action, Standard Operating Procedure (b) “Control of noxious weeds will not be conducted within ¼ mile of active sage grouse leks while sage grouse are using the leks during the lekking season.”

1995 Memorandum of Understanding coordinating the management of undesirable plants across 13 federal and California State agencies.

1996 Memorandum of Understanding for weed abatement across 9 federal and California and Nevada State agencies.

Federal Noxious Weed Act of 1974, as amended November 28, 1990.

Surprise Resource Area Fire Strategic Plan, Phase One

Livestock Grazing System Summary

System	Allotment/Pasture	Acres	Use levels
Alternate, early & rest Total Acres: 215,577	Nut Mountain/ Cavalry Camp Seeding	4,394	Mod/Heavy
	Wall Canyon East/ South 1/2	20,377	Light livestock use, wild horse use additional.
	Massacre Mtn/ Little High Rock	24,127	Slight livestock use, wild horse use locally heavy.
	Long Valley/ Black Hills and Lone Spring Seeding	11,948	Mod/Heavy
	Sand Creek/ 49 Seeding	6,321	Mod/Heavy
	Home Camp/ Lower	104,523	Light, locally heavy around water.
	Bare/ Old Camp	20,690	Light/Mod use cows and horses.
	Bare/ West Summit	12,545	Light use cows and horses.
	Bare/ Lost Creek	10,652	Light, locally heavy use along Lost Creek.
	Annual, early Total Acres: 134,062	Massacre Mtn/ Dogleg	9,327
Massacre Mtn/ Massacre Bench		11,918	Mod, locally heavy around water.
Sand Creek/ Lowlands		1,000	Mod
Bull Creek/ Lower		13,335	Light, locally heavy around Bull Creek and springs.
Bull Creek/ Button Brush		5,473	Mod
Home Camp/ Seedings		7,400	Mod
Wall Canyon West/ Seeding		3,700	Mod/Heavy
Duck Lake/ East		38,334	Light, locally heavy in Wall Cyn Creek and around water.
Lower Lake		9,095	Light, locally mod around private land.
Denio/ South		12,410	Mod, locally heavy around water.
Bare/ No & So Hoover		22,070	Light, locally heavy around Cherry & Lost Creeks.
Alternate, mid/late & rest	Massacre Mtn/ Yellow Rock	18,500	Slight/light livestock use, wild horse use additional.
	Massacre Mtn/ Grassy Table	22,300	Mod, locally heavy around water.

Total Acres: 164,618	Bare/ East Summit	17,363	Light, locally heavy around water.
	Bare/ Clover Creek	48,628	Light/mod, locally heavy around water.
	Bare/ Fox Mtn	8,642	Light, locally heavy along Cottonwood Creek.
	Bare/ Hog Mtn	49,185	Light, locally mod/heavy along Leadville, springs.
Annual, mid/late Total Acres: 197,484	Massacre Lakes/ Sand Springs Spray	6,783	Mod, locally heavy along main road and Sand Spring
	Nut Mountain/ Hanging Rock	40,227	Mod/Heavy, locally heavy in Hanging Rock, Rock Spring, and Nut Spring drainages
	Wall Canyon East/ North 1/2	20,377	Light, locally mod/heavy around water.
	Massacre Mtn/ Mountain	18,500	Mod, locally heavy around water.
	Massacre Mtn/ Ranch	462	Mod, locally heavy
	Long Valley/ Mountain	11,577	Mod, locally heavy around Lone Spring and Sand Spring
	Long Valley/ Valley Bottom	6,860	Mod, locally heavy around 49 Lake, Central Lake, and Powers Well
	Bull Creek/ Bull Springs and Plateau	20,658	Light/Mod, locally heavy around Willow Creek
	Home Camp/ Mountain	32,450	Light/mod, locally heavy around water.
	Duck Lake/ West	27,488	Light, locally heavy around water.
	Denio/ North	12,102	Light, locally heavy around water.
Alternate, season-long & rest Total Acres: 34,116	Wall Canyon West/ East	15,100	Mod/heavy
	Wall Canyon West/ West	19,016	Light/mod
No livestock grazing Total Acres: 45,431	Bicondoa/ Bighorn Range	3,800	None/slight
	Massacre Mtn/ High Rock Cyn	41,400	Slight/light horse use, locally heavy around water.
	Massacre Mtn/ Stevens Camp, Pole Corral	231	Varies depending on condition of fences.

Livestock Utilization Criteria

Allotment	Upland	Riparian	Authority
Nut Mountain	Moderate grasses Light bitterbrush		C/M LUP, Sub #2, Dec. #6
Massacre Lakes	Moderate grasses Light bitterbrush		C/M LUP, Sub #2, Dec. #6
Massacre Mtn	Moderate grasses Light bitterbrush		C/M LUP, Sub #2, Dec. #6
Wall Canyon East	20-40%	4" stubble on Wall Canyon and Cottonwood Creeks	Decision
Long Valley	Moderate native Heavy seeded		AMP
Sand Creek	40-60%		C/M LUP, GD #3
Bull Creek	40-60%	4-6" stubble on Willow Creek	C/M LUP, GD #3 Decision
Home Camp	50%	3" stubble	AMP
Wall Canyon West	40-60%	5" stubble 5% bank alt on Wall Cyn Crk & Big Spring	Decision
Bare	60%	60% by July 1 40% by Oct 1	AMP
Duck Lake		40%	Decision
Denio	40-60%		AMP
Lower Lake	60%		AMP