



4-30-98

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Surprise Field Office

P.O. Box 460

602 Cressler Street

Cedarville, CA 96104

(530)279-6101 - (530)279-2171 FAX

April 30, 1998

In Reply Refer To:
8500(CA-370)P

NOTICE OF PROPOSED ACTION EVANS CAMP RIPARIAN PASTURE FENCE

State: Nevada
County: Washoe
Field Office: Surprise Field Office, Cedarville, CA

WSA:	<u>Number</u>	<u>Name</u>	<u>Acreage</u>
	CA-020-1013	Massacre Rim	110,000

*MOUNTAIN
BITNER*

Date 30 day notification period ends: May 30, 1998

1. Description of Action

The proposed action is to construct approximately 2.5 miles of barbed wire fencing. The fencing will be used to control use in a degraded riparian zone by livestock and wild horses. This project has been proposed in the Environmental Assessment for the Bitner Management Plan Revision (EA-370-98-05).

2. Location of Action

Please see attached map. Location shown is approximate. Design and layout of fence not yet finalized.

3. Description of Activity

Approximately 2.5 miles of barbed wire fencing will be constructed. During construction, vehicle access will be limited to existing ways and roads. These activities will not adversely affect the evaluation of the WSA.

The Bitner Management Plan Revision EA is available upon request.

4. Chronology of Events

Cowhead/Massacre EIS. 9/80

Bitner/Sheldon Coordinated Management Plan 8/83

Bitner Management Plan Revision Environmental Assessment 4/98

5. Contact for Further Information

Susan Stokke
Surprise Field Manager

or,

Rob Jeffers
Supervisory Natural Resource Specialist

Bureau of Land Management
Surprise Field Office
P.O. Box 460
Cedarville, CA 96104
(530) 279-6101

Massacre Rim WSA Boundary
(CA-020-1013)

Proposed Evans Camp Fence
(Approx. Location) →

T. 44 N.

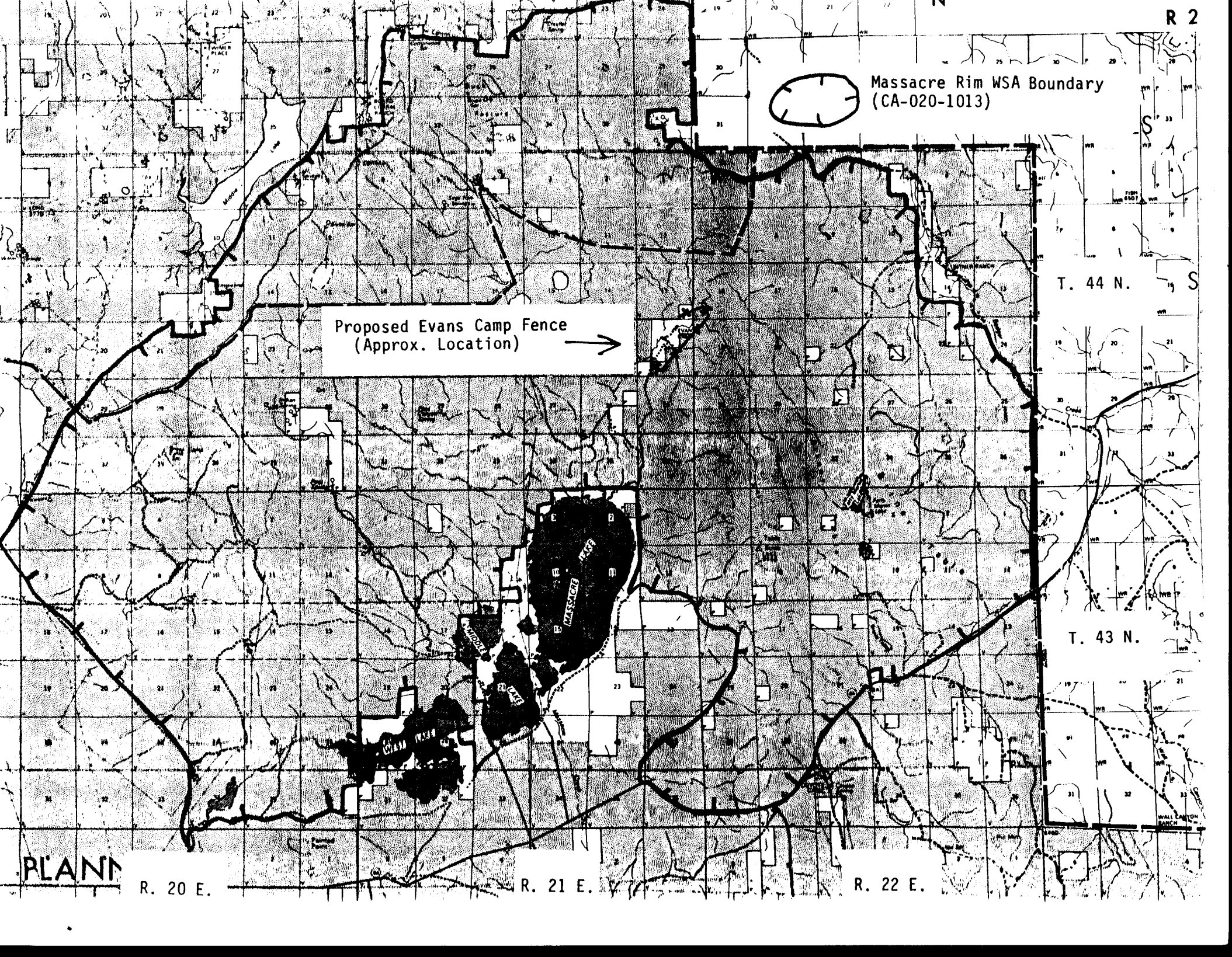
T. 43 N.

PLANN

R. 20 E.

R. 21 E.

R. 22 E.



NEVADA STATE CLEARINGHOUSE

Department of Administration
Budget and Planning Division
209 East Musser Street., Room 200
Carson City, Nevada 89701-4298
(702) 687-4065
fax (702) 687-3983

DATE: May 4, 1998

Governor's Office
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Region 3
Conservation Districts
State Parks
Water Resources
Water Planning
 Natural Heritage
 Wild Horse Commission

Nevada SAI # E1998-127

Project: Proposed Riparian Fencing for Evans Camp, Bitner

Yes No Send more information on this project as it becomes available.

CLEARINGHOUSE NOTES:

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and program; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than **May 27, 1998**. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. Questions? Maud Naroll, 687-6366.

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

No comment on this project
 Proposal supported as written
 Additional information below

Conference desired (See below)
 Conditional support (See below)
 Disapproval (Explain below)

AGENCY COMMENTS:

If the action will decrease water supply to horses and wildlife, mitigation should include supplying water through troughs + pipelines outside the enclosure.

Cathy Bowen
Signature

s:shardir:clearclear.doc

Wild Horse
Agency

5/7/98
Date



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Surprise Field Office
P.O. Box 460
Cedarville, CA 96104
530-279-6101
530-279-2171 FAX

In Reply Refer To:
4130 (CA-370) P

April 21, 1998

BITNER Management Plan Revision Environmental Assessment CA-370-98-05

BACKGROUND

The Bitner/South Catnip Coordinated Grazing Management Plan was finalized in August 1983, following completion of the Cowhead/Massacre Management Framework Plan. The grazing system called for the rotation of livestock between the Bitner Allotment and the Sheldon National Wildlife Refuge. In 1993, livestock grazing was excluded from the Refuge. Since that time, Don Coops, the grazing permittee, has grazed his cattle in a rotational system on the Bitner Allotment by means of herding. The private meadows associated with Bitner Ranch were grazed generally in the fall as needed by the landowner/permittee Mr. Coops.

By 1995, all private lands in the Bitner Allotment became public through a land exchange. This affected approximately 3075 acres of upland range and six fenced fields containing approximately 805 acres, including large meadow areas.

The Bitner Allotment is located about 40 miles north and east of Cedarville within Washoe County, Nevada. The allotment is now 28,939 acres in size, with no private lands within its boundaries. The allotment is north of Highway 8A and the north and east boundaries are the Sheldon National Antelope Range (See Attachment #1-Location Map)

In 1997, two Technical Review Teams (TRT) were formed under the authority of the Modoc/Washoe Experimental Stewardship Committee. One team was tasked to examine the allotment and make recommendations for the allotment and acquired meadow lands. During June and July of 1997, two trips were made to the allotment to examine resource conditions and develop a management scheme. On August 13, 1997, a final report was developed. This report was presented to the Modoc/Washoe ESP Steering Committee on October 21, 1997. The second team was asked to review the status of actions associated with the visitor use and historic aspects of High Rock Canyon, Massacre Ranch, and Bitner Ranch. This team also presented its report to the Steering Committee on October 21, 1997. This team made recommendations on the kinds of public access that would be appropriate and an approach to evaluate the future use of the ranch site.

PURPOSE AND NEED

Revising the existing Allotment Management Plan is needed for a variety of reasons:

- Cattle grazing was eliminated from the Sheldon NWR, making the current Coordinated Plan unworkable. A revision is needed to insure proper management of Bitner Uplands.
- To implement management on the acquired meadow lands and Patent Field.
- To establish realistic, measurable objectives for the allotment.

Making a decision on the appropriate level of public access to the Bitner Ranch area is needed because there are historic and natural resources at the site that may be damaged by increased visitor use particularly use associated with vehicles.

CONSISTENCY WITH LAND USE PLAN/POLICY

The Cowhead/Massacre Management Framework Plan, approved in April, 1981 contains land use objectives and decisions for the entire planning area. The MFP has been reviewed and compared again with the two alternatives to be evaluated in this assessment. *The alternatives are consistent with the land use plan.*

APPLICABLE LAND USE PLAN DECISIONS

1. Designate the Bitner Allotment for ~~intensive livestock grazing~~
2. Divide the Nut Mountain Allotment into the Bitner and Nut Mountain Allotments.
3. Allocate forage among both consumptive and non-consumptive resources. As additional forage becomes available, increased allocations will be made to wildlife, wild horses and livestock, based on needs, response to management and policy.
4. Manage the ecological sites for mid-successional vegetative conditions (50-75% of ecological climax).
5. Establish moderate use on grasses and light utilization on bitterbrush as the upper limits for livestock.
6. Ensure that sufficient browse is available to support reasonable numbers of deer.
7. Provide habitat in satisfactory condition to support reasonable numbers of antelope.

FALLBACK STANDARDS AND GUIDELINES

The Bitner Allotment has been designated a Category 2 Allotment. That is, all standards are being met; or, significant progress is being made toward the standards.

Applicable Rangeland Health Standards¹:

- | | |
|-------------------|---|
| Soils: | Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form. |
| Riparian/Wetland: | Riparian-wetland areas are in properly functioning condition. |
| Streams: | Stream channel morphology (including but not limited to gradient, width/depth ratio, channel roughness and sinuosity) and functions are appropriate for the climate and landform. |
| Native Species: | Healthy, productive and diverse populations of native species exist and are maintained. |

Based upon a review of the information available for the allotment, the applicable standards are being met or the proposed action would allow the standards to be met in the near future. Documentation of the standards determination is contained in Appendix A.

SCOPING PROCESS

The proposed action was developed by two TRTs following on-site review and evaluation of the allotment during June and July, 1997. TRT members for the Grazing TRT included the grazing permittee, BLM personnel, a Certified Rangeland Specialist and a College Professor from the University of Nevada, Reno, with expertise in sage grouse and pronghorn antelope management.

The Visitor Use and Historic TRT included representatives of the BLM, the Nevada State Historic Preservation Office, the Oregon-California Trails Association, Public Resource Associates, the California Association of 4-Wheel Drive Clubs, and the livestock permittees.

An interdisciplinary team from the BLM's Surprise Resource Area staff identified the resources within the allotment that potentially would be affected, the issues to be resolved, and the alternatives to be considered by the TRT.

¹ Fallback Standards

The proposed action was subsequently reviewed by the Northeastern California Resource Advisory Council (RAC) and the Modoc-Washoe Experimental Stewardship (ESP) Committee in October, 1997. Over 300 key publics were also informed about the proposed action in the Surprise Resource Area Update issued November, 1997. No additional issues were identified by the key publics.

For the purposes of the TRT analysis, the allotment was sub-divided into three areas: 1. Meadows, 2. Patent Field and 3. Bitner Uplands (See Attachment #2 Allotment Map).

The Grazing TRT recommended the following Desired Conditions for each of the areas within the allotment:

Patent Field

- > Maintain vigor and diversity of current vegetation.
- > Maintain current wildlife habitat conditions.
- > Maintain condition of Quarry Spring and associated meadow area.
- > Stabilize the channel on Badger Creek.

Bitner Uplands

- > Maintain vigor and diversity of vegetative species.
- > Maintain the current composition of Bluebunch wheatgrass and Idaho fescue.
- > Maintain other species of perennial grass and forb species.
- > Maintain present good condition of bitterbrush stands.
- > Maintain current wildlife habitat.
- > ~~Maintain current wildlife habitat.~~

Bitner Meadows

- > Maintain diversity of forb species on meadow areas.
- > Maintain or improve habitat conditions for sage grouse broods.
- > Stop small, active headcuts in Middle Field.

- > Stop headcut in Lower Field and raise channel bottom.
- > Decrease occurrence of poverty weed in Middle Field.
- > Prevent the spread of sagebrush, silver sage and rabbitbrush into meadow areas.
- > Meadows should have a grazed but patchy appearance at mid-summer, for sage grouse habitat needs.

Issues Selected for Analysis

The following issues were identified during the scoping process:

Impacts on Upland Vegetation

The livestock grazing management practices initiated in 1983 have been successful in increasing the vigor of perennial grasses and other vegetation. In the Bitner Uplands, Thurber's needlegrass is the dominant grass species, with Idaho fescue locally abundant on north slopes. There are also areas with good cover of squirreltail and Bluebunch wheatgrass. Forbs are plentiful in the area with very good diversity. Bitterbrush appears to be in good condition. A grazing strategy that decreased the existing vegetation condition would not meet objectives.

Impacts on Riparian Habitat

The meadow areas associated with Badger Creek show a very good diversity of forb species. There are localized areas displaying some down-cutting. In some portions of the meadow areas, poverty weed, sagebrush and silver sage are invading. There is potential to stabilize the banks on Badger Creek, raise the water table and re-establish woody vegetation. There is also a population of tui chubs associated with the spring in the Wrangle Field below the Ranch site. The objectives have a different focus than the previous private land management.

Impacts to Wilderness Values

Much of the allotment is within the Massacre Rim Wilderness Study Area, (WSA No. CA-020-1013). Management actions must comply with the Interim Policy for Lands Under Wilderness Review, which precludes uses that would impair wilderness values.

The entire Bitner Uplands is within the Bitner Herd Management Area (CA-267). This HMA is home to 15-25 wild horses. Specially designed "horse gates" have been installed in the southern and western boundary fence to allow normal migration to lower elevation areas during the winter. Management actions should take into account habitat needs and migration patterns of wild horses.

Impacts to Sage Grouse

Sage grouse nesting and cover habitat appears good in the uplands and brooding habitat very good in the meadow areas. Significant changes in grazing management could adversely affect sage grouse habitat either in the uplands or the meadows.

Potential Social and Economic Impacts

The permittee would like to have his permitted use increased, in proportion to the amount of acreage BLM acquired in 1995. His current permitted use is based on the Bitner Uplands only.

Issues Considered but Dropped From Further Analysis

The following issues were considered but dropped from further analysis:

Wild and Scenic Rivers, Air Quality, Timber, ACEC, and Recreation. Either these resources and uses are not found in the allotment, or in the case of recreation, at levels so low and dispersed that grazing has no known impact.

Alternatives

Through the scoping process, two alternatives were selected for detailed consideration:

Proposed Action

Under the *Proposed Action*, approximately 350 cattle would be allowed to enter the allotment on April 16. Turnout would occur into the lower elevation areas of the Bitner Uplands. On July 15, 150 head would enter the Bitner Meadows and graze until August 15 at which time they would be moved to the Patent Field to graze until September 30, when they would be moved back to the meadows. The other 200 head would remain in the Bitner Uplands until September 15, when they would be moved to the meadows. Only one half of the Bitner Uplands would be used each year with grazing use being alternated between the north and south. The meadows would have various treatments as discussed in the table below with two fields not to be grazed in the foreseeable future. All livestock would be removed from the allotment by October 15.

Additional range improvements, aimed primarily at stabilizing riparian areas and providing meadow protection are part of the proposed action (See Attachment #3: Proposed Range Improvements). Specifically, the proposed action includes development of a riparian pasture at Evans Camp, reconstruction of fences around the Bitner Meadows, fencing the large headcut in the Lower Meadow Field, and the construction of structures to stabilize the main and side channel head-cuts.

Short and long term monitoring will be conducted to determine progress in meeting objectives and Standards for Healthy Rangelands.

The historic road through the ranch and down along the east side of the meadows will be closed to public motorized vehicle access. This would limit access on about two miles of road. Non-motorized vehicle access would be maintained. Public visitors that have used the old road through the ranch and the meadows would be required to use the new road constructed in the fall of 1997 that is east of the existing road.

No Action

The *No Action* alternative would continue the current management. Cattle would graze the Bitner Uplands from about April 16-October 15 of each year. The current rotational scheme would continue and consists of the cattle being kept north one year, and south the next year by herding. The Patent Field would continue to be used from April 12 to May 20 of each year. All of the meadows would be used between September 1st and October 31st each year. No new range improvements would be constructed.

The two miles of existing road through Bitner Ranch and along the east side of the meadows would remain open to public motorized vehicle use.

The livestock grazing practices of the two alternatives are outlined in the table which follows to allow for a side by side comparison.

Activity	Alternative	
	Proposed Action	No Action
Total Stocking Rate	350 Cattle from 4/16 -10/15 10 horses from 4/16 to 10/15 (Horse Field) 2100 AUMs total (1703 AUMs total permitted use plus 397 AUMs temporary non- renewable).	283 Cattle from 4/12-10/31. 10 horses from 4/12-10/31 1960 AUM's total authorized (255 AUMs temporary non-renewable) includes about 1,000 AUMs use on the meadows and Patent Field as determined by livestock operator.
Grazing Strategy	Alternate livestock use between the north and south portions of the Bitner Uplands. The Patent Field would be used mid-August through end of September each year. The Headcut and Wrangle fields would not be grazed. The 1st Field would be used in conjunction with the Patent Field. The Middle Field would be used each year the first two weeks in October. The Horse Field would be used by about five horses throughout the summer and fall and would be used by a few cattle during late September and early October. The Upper and Lower Fields would Alternate use for about a month in either in mid-summer or September-October.	Alternate use between the north and south each year through herding. Use the Patent Field each year from 4/12-5/20. Utilize meadows after September each year with use in each field determined by the livestock permittee.
Proposed range improvements	1. Meadow Fence Reconstruction 2. Headcut structures, plant willows, construct exclusion fence 3. Evans Camp Riparian Fence	None Proposed

Alternatives Dropped from Detailed Study

An additional alternative the same as the proposed action but with a permanent increase in permitted use providing for grazing in the Bitner Meadows and Patent Field. The alternative was dropped because there is no monitoring data showing increased use could be supported on a sustained basis.

AFFECTED ENVIRONMENT

The affected environment of the Bitner Allotment has been discussed in the (1981) Cowhead/Massacre Grazing EIS. Wilderness values were discussed in the 1986 Eagle Lake - Cedarville Study Areas Final EIS. Only additional information collected since the EIS which is pertinent to the issues, is included here.

For approximately 20 years prior to 1991, numbers of livestock and season of use in the Bitner Allotment was as many as 700 cattle from 4/15-7/10. Cattle were then moved to the Sheldon Antelope Range. Deeded ground (Patent Field and the Bitner Meadows) were used late each year from September to November. The estimated harvest in the allotment, including meadows and Patent Field was as many as 3,000 AUMs.

Since 1991, 350 or less head have used the allotment from approximately 4/12- 10/31, with the Bitner meadows being used after September 1. The total estimated harvest was as many as 2,700 AUMs including the Patent Field. The Bitner Uplands was used on a rotational basis through herding with cattle using the north side one year and the south side the next.

The Bitner Uplands and Patent Fields contain a very good cover of perennial grasses and forbs. The dominant grass species is Thurber's needlegrass with north slopes dominated by Idaho fescue. Bitterbrush occurs throughout the uplands. The bitterbrush appears vigorous with good form class and age classes.

The meadows are fenced into six fields of various size. The meadows are in good condition for the most part with good production and a diversity of forbs and native perennial grasses. The middle and horse fields have appear to have increasing silver sagebrush and poverty weed. The Wrangle Field also contain very small fens, which appear to be stable. In the bottom of the Lower Field there is a one foot tall, 30 foot wide head cut that originated on the Sheldon National Wildlife Refuge and is slowly moving upstream. There are also several very small headcuts in the Middle Field.

Habitat for mule deer, antelope, and sage grouse is found in the allotment. The most important species is sage grouse. Quality sage grouse habitat is generally considered to include the following components: sagebrush cover with patches of tall and dense shrubs, a good cover of herbaceous species including both grasses and forbs with high digestibility, insects during the brooding season, water, and low levels of disturbance from humans. The Bitner allotment contains all these factors. The locked gates on the Ranch when it was in private ownership restricted the public access not only to the meadows, and also to much of the uplands on the eastern portion of the allotment. This resulted very low levels of public access and consequently little disturbance to sage grouse either in the nesting or hunting seasons. A population of native fishes, the tui chub are found in the immediate vicinity of the spring in the Wrangle Field. The historic distribution of the fish within the meadows is unknwn.

During a census conducted in September, 1997, ~~24 wild horses (19 adults and 5 foals)~~ were counted. The allotment contains year round habitat for these horses, but special gates have been constructed in the south and west boundary fence to help facilitate migrations to the lower elevation areas during bad winters. Horses have been observed to concentrate in the vicinity of water sources during the hot, dry summer months, including Evan's Camp, Fat Martin Lake, and Buck Spring.

One permittee is authorized to graze the Bitner Allotment. This individual has been involved in the operation of the allotment for over twenty years.

The road through Bitner Ranch and north along the eastern edge of the meadows was open to public vehicle traffic for the first time in 1997. Field observations during the 1997 field season indicated the

public did not always stay on the road, and ruts were evident in the meadow, in several small seeps, and in the roadway.

ENVIRONMENTAL CONSEQUENCES

Impacts on Upland Vegetation

Under the *Proposed Action*, vegetation conditions would be expected to remain in good condition and possibly improve. The total livestock harvest in the Bitner Uplands Field would decrease by about 250 AUMs each year and about one half of the Field would be rested each year. Bitterbrush vigor in the Bitner Uplands would be expected to remain the same or slightly improve, because livestock use during the period when bitterbrush is palatable to cattle would decrease by about 650 AUMS.

In the Patent Field, it is expected that deferred use (8/15-9/30) would have a positive impact on perennial grass species, allowing them to complete their life cycles each year. Total livestock use would decrease by about 100 AUMs each year.

Under the *No Action* alternative, or current management, upland herbaceous vegetation is mostly healthy, diverse, and vigorous. The rotational system with the Sheldon Antelope Range from 1983 to 1993 resulted in only early use of the Bitner Uplands, and allowed approximately one half of the entire area to receive alternate years rest. Since 1993 the Bitner Allotment has been grazed season long (4/16-10/15). The rotational system has continued, allowing rest on one half the allotment each year. The Patent Field has been used early each year. The no action alternative would allow maintenance of current conditions in the Bitner Uplands. Perennial grass and forb species would continue to be diverse and vigorous. Perennial grass species in the Patent Field could be expected to slowly decline in condition due to annual grazing during the critical growth period.

Impacts on Riparian Communities

Under the *Proposed Action* alternative, the headcut in the Lower Field would be stabilized through the use of headcut structures, fencing and planting of willows. This would eliminate the potential loss of additional meadow and the exclosure would accelerate the recovery of drained meadow below the headcut. Grazing use in the meadows would be of much shorter duration and total use would decrease by about 150 to 250 AUMs each year, with the objective of leaving a "patchy" grazed appearance with an average of 4" stubble height. The decrease in grazing would provide additional stubble during the critical runoff period to capture sediments. The two meadow fields that would not be grazed would be expected to decrease in plant species diversity, as grasses and grass like species exclude the forbs that are stimulated by grazing. Increased residual vegetation is also expected to decrease the poverty weed in the Middle Field. The rate of invasion of meadow perimeters from silver sagebrush and rabbitbrush would be expected to decline due to reduced levels of livestock grazing on the meadows.

The proposed action calls for the reconstruction of fences surrounding the meadows. This will improve control of livestock and prevent them from entering meadows when they are susceptible to damage (e.g. in spring when saturated). Under the proposed action, Evans Camp and the associated riparian habitat would be enclosed in a riparian pasture to control grazing use. This will have positive impacts to this area by excluding heavy use from horses and livestock during the hot season.

Quarry spring in the Patent field may be subject to increased grazing pressure as a result of shifting the grazing season from spring to summer. Increased pressure may result in excessive utilization on the tiny meadow and a downward trend in conditions on the site.

The small tui chub population would receive a slight benefit due to the decreased grazing in the Wrangle Field. The continued grazing in the fields below the Wrangle Field make it unlikely that the species would increase the habitat occupied.

Under the *No Action* alternative, it is expected the vegetation in the Bitner Meadows would continue to be diverse with good production due to heavy late season use. There would continue to be no residual vegetation at the end of the year for bank protection and to trap sediments. It is evident that the current management is not stabilizing active headcuts in the meadow areas. Under the *No Action* alternative headcutting would be expected to continue. Under the current situation, the riparian area associated with Evans Camp receives heavy use on alternate years. The condition of this riparian area would be expected to remain in unsatisfactory condition.

Upland shrub communities would remain in mostly good condition in the short term. The current level of summer grazing has only occurred since 1993 and may result in decreased bitterbrush vigor, and reproduction over the long term.

Conditions for the tui chub population would remain unchanged, with occasional heavy grazing occurring within the existing habitat.

Impacts to Wilderness Values

Under the *Proposed Action*, the Evans Camp riparian pasture would be developed within the Massacre Rim WSA. The pasture would require construction of about 2.5 miles of fence to control grazing by livestock and wild horses. No other range improvement projects are planned within the WSA. Naturalness would be negatively affected in the immediate vicinity of the new fence; however improvement to the riparian area would improve naturalness on a vegetation community to important to most wilderness users. The project would not measurably affect naturalness within the entire WSA. Decreasing livestock use by about 15 percent would slightly increase some visitor's opportunity for solitude on about one quarter of the WSA. The proposed action would not appreciably change visitor's opportunities for primitive and unconfined recreation. The proposed action would have no impact on wilderness values within the Massacre Rim WSA as a whole.

The *No Action* alternative would have no further impacts to the wilderness characteristics of the area.

The *Proposed Action* would result in less competition between wild horses and livestock in the Bitner Uplands for forage and available water during the late season. Because there appears to be adequate herbaceous vegetation for both livestock and wild horses at the current time, this benefit will be minimal.

The *No Action* alternative will result in no additional impacts to wild horses. Under current management, there appears to be adequate forage and habitat for wild horses.

Potential Impacts to Sage Grouse


Under the *Proposed Action*, managing meadows for a patchy appearance, grazing to favor forb production on meadows, not grazing portions of meadows to provide dense herbaceous cover, decreasing upland livestock use, and decreasing vehicle travel in and near the meadows all should provide benefits to sage grouse. However, because sage grouse are affected by many factors, it is impossible to predict actual impacts on the population that uses the Bitner Allotment.

Under the *No Action* alternative, sage grouse may be adversely affected over the long term. This because of the increased public use of the Bitner Meadows especially with vehicles, the potential for a decline in herbaceous vegetation in the Patent Field, and the slow loss of meadow associated with the advancing headcut. However, as noted above, the actual impacts on sage grouse populations are impossible to predict.

Potential Social and Economic Impacts

Under the *Proposed Action*, economic return the grazing permittee would be increased over present authorized levels due to the temporary increase of about 400 AUMs. However, this level of grazing is a decrease of as much as 1,000 AUMs estimated to have been harvested from the Allotment, including the meadows and the Patent Field, before the land exchange. Therefore the net economic change to the permittee is negative. However, the actual loss is difficult to calculate because the total harvest of livestock forage from the Allotment fluctuated greatly between 1989 and the present due to the yearly changes in the permittees operation. The paid retirement of permits on the Sheldon NWR in the early 1990s and the payment from the third party to the permittee as part of the Bitner land exchange in 1995 may have resulted in changes to the permittees operations that have had a net economic benefit to his operation. Impacts on the local economy are difficult to assess. While there has been a decrease in permitted AUMs on public lands, the purchase of the Bitner Ranch by a third party for exchange with the BLM, may have resulted in unknown but offsetting economic benefits in the local economy.

Under the *No Action Alternative*, the AUM harvest, and the stocking rates are less than the proposed action, therefore economic costs to the livestock operator would presumably be greater than for the proposed action. Again, without a complete evaluation of all the economic factors affecting the permittee this is speculation. Impacts on the local economy are largely unknown for the reasons discussed above.


The Evans Camp fence will include special horse gates to aid movement of horses through the field during the severe winters.

The meadow at Quarry Spring in the Patent Field will maintain four inches of residual vegetation at the end of the grazing season or will be fenced to exclude livestock.

If perennial pools are maintained in the Headcut Field, transplant tui chubs into the pools.

Monitor the fens, and the immediate vicinity to determine livestock use and damage. If damage is occurring exclude livestock.

Unavoidable Adverse Impacts

None

Irreversible and Irretrievable Commitment of Resources

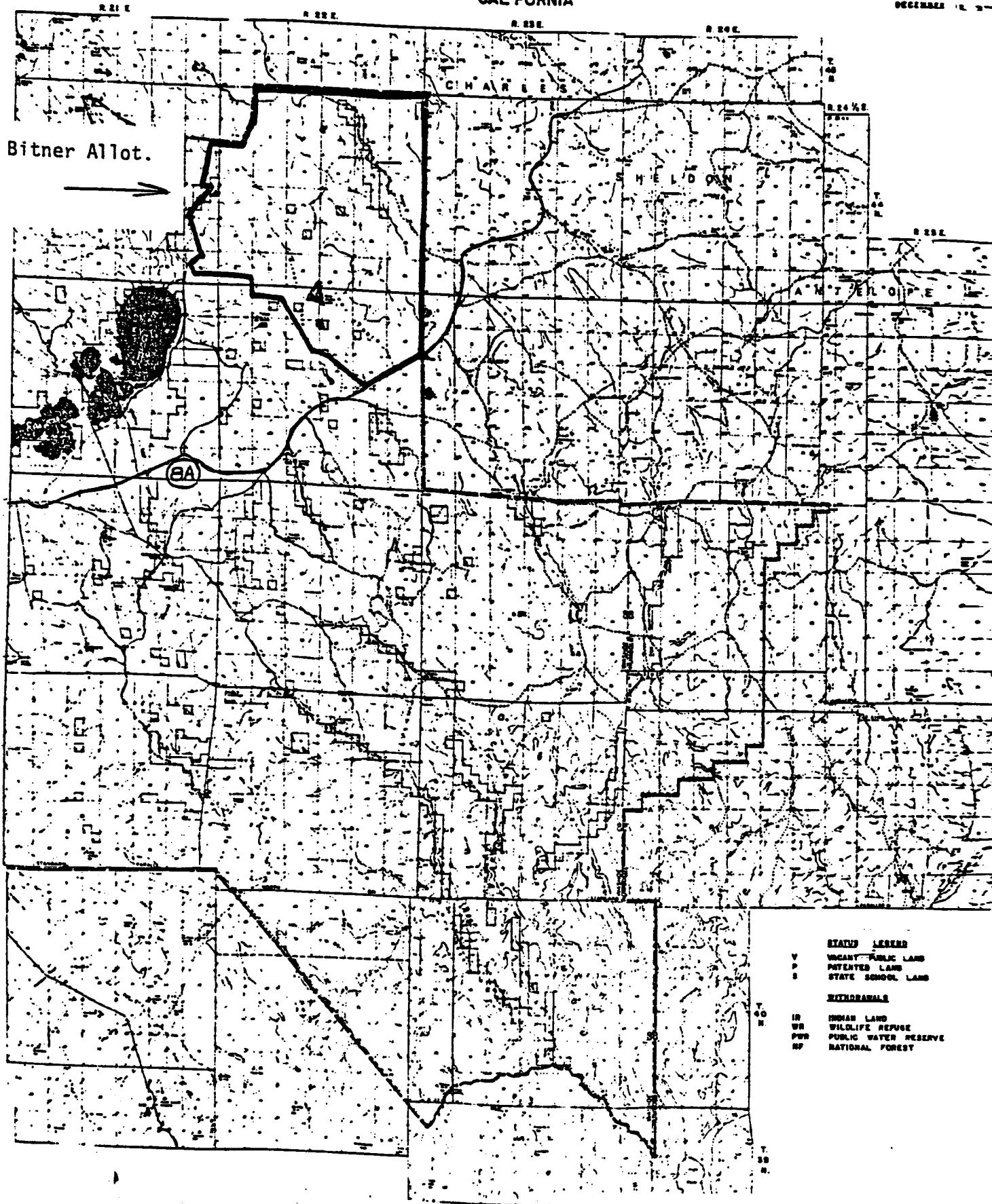
There are no irreversible or irretrievable commitments of resources.

CONSULTATION

The Proposed Action was developed in consultation with the livestock permittee and TRT representatives. The Proposed Action was subsequently presented to the Modoc-Washoe Experimental Stewardship Committee.

LIST OF PREPARERS

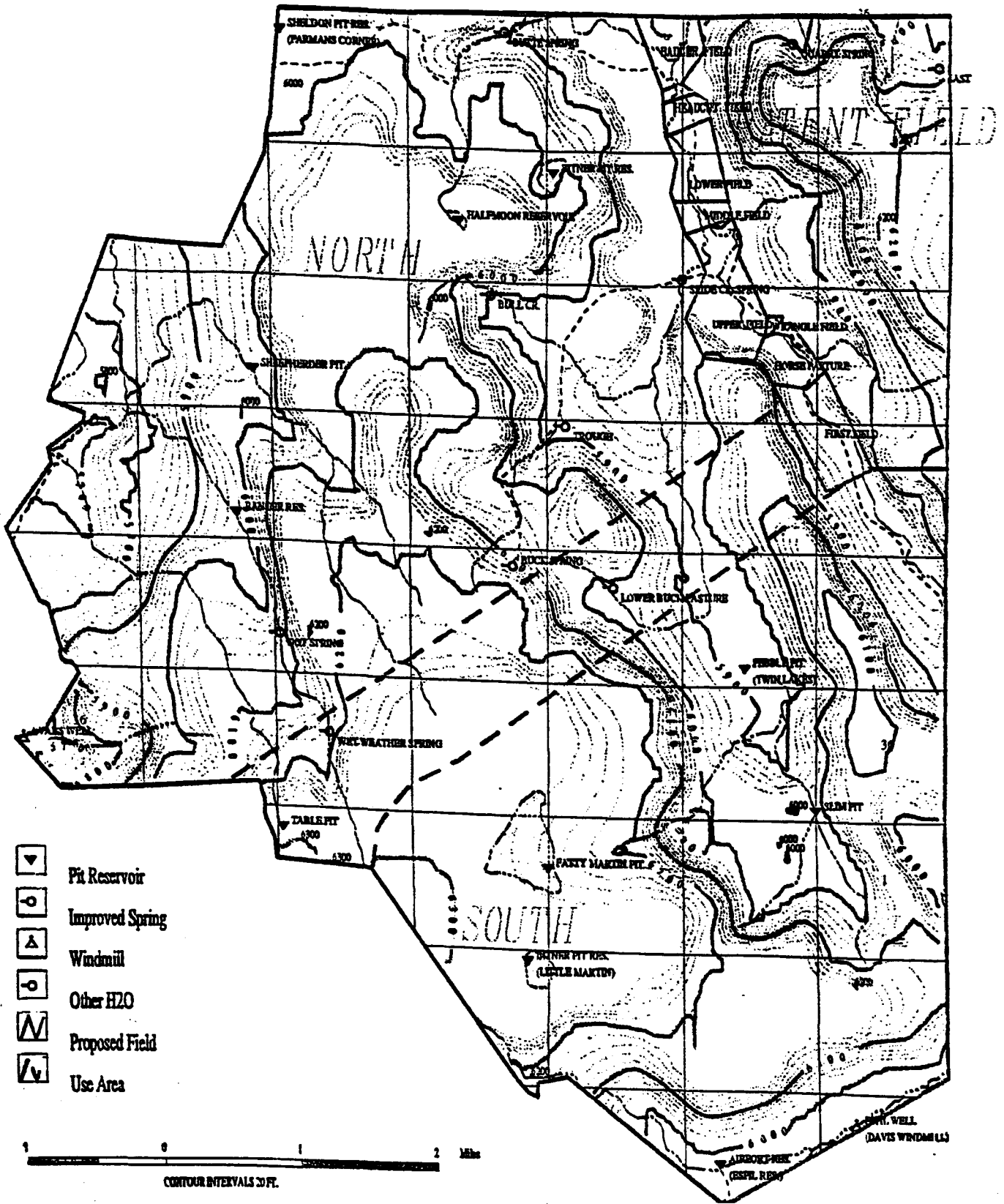
Rob Jeffers, Supv. Natural Resource Specialist
Roger Farschon, Wildlife Biologist
Andy Delmas, Range Conservationist



STATE LEGEND
 V VACANT PUBLIC LAND
 P PRIVATE LAND
 S STATE SCHOOL LAND

WITHDRAWALS
 IR INDIAN LAND
 WR WILDLIFE REFUGE
 PWR PUBLIC WATER RESERVE
 NF NATIONAL FOREST

BITNER TRT MAP

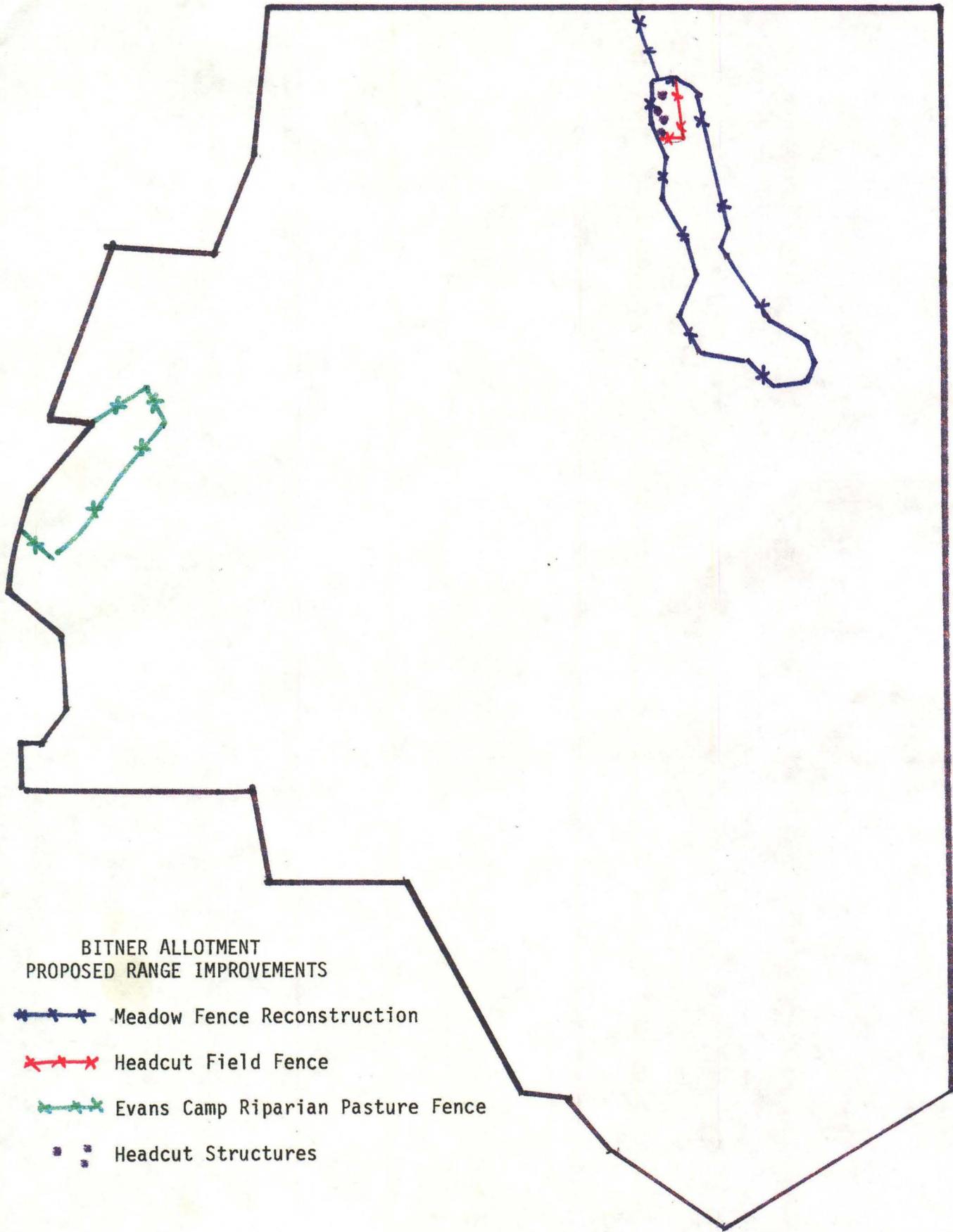


Original data was compiled from various sources. Spatial information may not meet National Map Accuracy Standards.

ATTACH. 2- Allotment Map

Bitner Allotment
Proposed Range Improvements

<u>Project</u>	<u>Quantity(approx.)</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Meadow fence Reconstruction	8.0	miles	\$3,000.00	\$24,000.00
Evans Camp Riparian Pasture Fence	2.5	miles	\$3,000.00	\$7,500.00
Headcut structures	5	ea	\$1,000.00	\$5,000.00
Headcut Field Fence	1	mile	\$3,000.00	\$3,000.00



BITNER ALLOTMENT
PROPOSED RANGE IMPROVEMENTS

- ◆◆◆ Meadow Fence Reconstruction
- ××× Headcut Field Fence
- ◆◆◆ Evans Camp Riparian Pasture Fence
- ■ Headcut Structures