

**U.S. Department of the Interior
Bureau of Land Management**

**Environmental Assessment WY-100-EA09-20
April 23, 2009**

**Environmental Assessment for the Greater North Labarge Area Grazing
Allotments Range Improvement Projects and Permit Renewal**

Location: Northwest corner: T29N R115W Sec. 11; Northeast corner: T29N R111W Sec. 8; Southwest corner: T26N R114W Sec. 24; Southeast corner: T26N R112W Sec. 20.

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INTRODUCTION

Purpose of and Need for Action

The purpose of this Proposed Action is to authorize livestock grazing in the ten allotments listed in Table 1 in conformance with the Pinedale Field Office Resource Management Plan (Pinedale RMP) November 2008 objectives for livestock grazing. Authorization is needed on these allotments because:

Where consistent with other multiple use goals and objectives there is Congressional intent to allow grazing on suitable lands. (*The Taylor Grazing Act of 1934, The Classification and Multiple Use Act of 1964, Federal Land Policy and Management Act of 1976, The Public Rangelands Improvement Act of 1978*)

The allotments contain lands identified as suitable for domestic livestock grazing in the Pinedale RMP and continued domestic livestock grazing is consistent with the management goals, objectives, and actions in the Pinedale RMP (pg 2-17 – 2-18, Pinedale RMP ROD).

It is Bureau of Land Management's policy to make forage available to qualified livestock operators from lands suitable for grazing consistent with land management plans. (*43 CFR 4100*).

The Pinedale RMP, which directs the management of lands contained within this project area, has as one of its goals to "maintain and/or enhance livestock grazing opportunities and rangeland health".

Livestock management is meeting desired conditions in all allotments except North Labarge Common. A revised grazing plan is being developed concurrently with this NEPA effort that addresses any management changes needed to move toward desired conditions in an acceptable timeframe. Specific desired conditions not being met are as follows:

- Approximately one mile of North Sawmill Creek is classified as Functioning at Risk. There are some mitigating circumstances beyond the control of grazing management that are likely contributing to riparian condition but changes in grazing management may be enough to move riparian classification toward Proper Functioning Condition. Specific mitigating circumstances will be discussed in detail in the grazing plan and this environmental assessment.

The purpose of the proposed action is also to implement several range improvement projects, herding practices, and administrative actions required to help maintain or meet desired conditions in the project area.

Scoping and Public Involvement Process

A scoping letter describing all alternatives was sent to permittees, interested publics, the Wyoming Department of Agriculture, and the Wyoming Game and Fish Department on March 12, 2009. Scoping responses were due April 1, 2009. This EA (and all associated documents) and all Notices of Proposed Decisions will be sent to the same scoping mailing list.

Issues

BLM-Identified Issues

- Impacts of livestock grazing on riparian condition
- Forage competition between livestock and wild ungulates
- Removal of residual cover from livestock grazing to the degree that sage grouse nest and early brood rearing success is inhibited
- Economic impacts of the "no grazing" alternative

Externally Generated Issues:

- Impacts of new fences on wildlife migration corridors
- Impacts of livestock grazing on Colorado River cutthroat trout populations in the Upper Green River Basin

Decision Framework

The Field Manager is the responsible official who will decide whether or not to continue to authorize livestock grazing on the project allotments and implement the proposed range improvements and other actions and if so, under what terms and conditions in order to continue to meet the Pinedale RMP objectives in a timely manner.

PROPOSED ACTION AND ALTERNATIVES

Alternative 1 - Proposed Action (implement the North Labarge Area Grazing Plan)

The Bureau of Land Management Pinedale Field Office (PFO) proposes to authorize livestock grazing in ten allotments (summarized in Table 1 and mapped in Figure 1) by implementing the North Labarge Area Grazing Plan.

Allotment	Allotment #	Acres
Beaver Crk Meadow	2142	1,974
Bird Individual	12206	598
Bridger Teton NF	122223	12,573
Dry Piney Ind	2100	1,899
Jory Ind	2099	934
Labarge Ind	2091	2,750
N. Labarge Com	2077	142,244
O Neil Ind	2163	776
Piney Place Meadows	2079	641
S Piney Ranch	2074	977

Those components of the plan subject to NEPA analysis are summarized below:

Grazing Practices

Table 2 summarizes the grazing schedules and associated animal unit months (AUM's) to be adhered to as part of the grazing plan.

Allotment Name	AUM's	Earliest On Date	Latest Off Date
Beaver Creek Meadow Individual	20	1-Sep	15-Nov
Bird Individual	14	1-Mar	30-Nov
Bridger Teton National Forest	1202	15-Jul	5-Oct
Dry Piney Ind	30	1-Jan	31-Dec
Jory Individual	49	1-May	1-Oct
Labarge Individual	336	1-Jul	30-Sep
North Labarge Common (Big Mesa Rotation)	5206	15-May	15-Oct
North Labarge Common (Black Canyon Pasture)	809	11-Jul	1-Oct
North Labarge Common (Calpet Pasture)	659	15-May	15-Oct
North Labarge Common (Chimney Rotation)	7831	15-May	15-Oct
O'Neil Individual	82	1-Oct	15-Nov
S. Piney Place Meadows	42	16-Oct	14-May
S. Piney Ranch	90	16-Oct	14-May

During summer 2008 proper functioning condition (PFC) surveys were conducted on all reaches that had been previously (1994-1999) classified as either non-functioning or functioning at risk (FAR) with either no apparent trend or a downward trend. The result of this work indicates that about 0.75 mile of North Sawmill Creek is still classified as FAR with a downward trend. While mitigating circumstances (discussed in detail in the Affected Environment section of this document) beyond the control of livestock grazing exist, the BLM and grazing permittees believe that concentrated herding of cattle out of this area may contribute to riparian recovery. Therefore, cattle will be allowed to naturally gather in this area after rotation into the Pine Grove pasture for 7-10 days to facilitate livestock management but permittees will then actively push cattle towards the fish corrals and onto Pine Grove Ridge, Narrow (Mormon) Ridge and Lake Ridge.

Range Improvements

- Chimney Butte Water Pipeline: The Chimney Butte Pipeline will consist of a 1.7 mile water pipeline connecting an existing livestock trough and pipeline system (the Dry Basin line) to an existing livestock water pit (the Chimney Butte Pit #2) in order to improve stock water availability in said stock pit. (Figure 2; T28N R112W Sec. 5, 6, T28N R113W Sec. 1)
- Big Mesa Drift Fence: The Big Mesa drift fence will consist of a 0.8 mile, wildlife-friendly drift fence in order to delay livestock use of vegetation in the western portion of the Big Mesa pasture (along the central portion of the Calpet road) by holding livestock owned or controlled by authorization numbers 4904437 and 4904419 in the north eastern portion of the Big Mesa pasture. (Figure 3; T28N R113W Sec. 27, TR48)

Other Actions

Administratively split North Labarge Common into two separate and smaller common allotments and two separate and smaller individual allotments. The allotment division is according to established (since the 1970's) livestock use patterns. Table 3 summarizes this division.

Current Allotment Name	Proposed Allotment Name	AUM's
North Labarge Common (Big Mesa Rotation)	Big Mesa Common	5206
North Labarge Common (Black Canyon Pasture)	Black Canyon Individual	809
North Labarge Common (Calpet Pasture)	Calpet Individual	659
North Labarge Common (Chimney Rotation)	Chimney Butte Common	7831

Flexibility

- Animal numbers can fluctuate annually as long as total permitted AUM's are not exceeded
- Turn-out and take-off dates can fluctuate annually but turn-out for any allotment cannot occur earlier than specified in Table 3 and take-off cannot occur later than specified in Table 3, except in accordance with 43 CFR 4130.4.

Alternative 2 - No Action (no change) Alternative

Livestock grazing would continue in the ten project allotments (Table 1 and Figure 1) according to the terms and conditions of the current permits. Table 4 summarizes the current permitted terms and conditions.

Table 4

Authorization	Allotment	Allotment Name	No. Cattle	Begin Date	End Date	% Public Land	AUM's
4904375	2142	Beaver Cr. Meadow Ind	43	15-Jun	28-Jun	100	20
4904419	12206	Bird Individual	14	20-May	19-Jun	100	14
4904347	12223	Bridger Teton NF	110	15-May	1-Oct	100	506
4904437	12223	Bridger Teton NF	128	1-Aug	5-Oct	100	278
4904307	12223	Bridger Teton NF	131	1-Jul	5-Oct	100	418
4904347	2100	Dry Piney Ind	6	15-May	14-Oct	100	30
4904347	2099	Jory Ind	300	1-Jul	6-Jul	83	49
4904346	2091	Labarge Ind	148	1-Jul	30-Sep	75	336
4904419	2077	N. Labarge Com	90	17-May	14-Oct	100	447
4904347	2077	N. Labarge Com	1083	15-May	1-Oct	97	4835
4904347	2077	N. Labarge Com	415	15-Jul	5-Sep	97	701
4904347	2077	N. Labarge Com	415	15-May	1-Jul	97	635
4904347	2077	N. Labarge Com	415	15-Sep	24-Sep	97	132
4904347	2077	N. Labarge Com	936	2-Oct	15-Oct	97	418
4904437	2077	N. Labarge Com	2	16-May	15-Jun	100	2
4904437	2077	N. Labarge Com	335	16-May	15-Oct	100	1685
4904437	2077	N. Labarge Com	158	15-May	30-Jun	100	244
4904437	2077	N. Labarge Com	137	1-Jul	5-Oct	100	437
4904437	2077	N. Labarge Com	158	6-Oct	15-Oct	100	52
4904375	2077	N. Labarge Com	137	16-May	15-Jul	99	272
4904375	2077	N. Labarge Com	303	16-Jul	15-Aug	99	306
4904375	2077	N. Labarge Com	202	16-Aug	2-Sep	99	118
4904332	2077	N. Labarge Com	367	15-May	15-Oct	100	1858
4904428	2077	N. Labarge Com	2	18-May	17-Jun	100	2
4904428	2077	N. Labarge Com	4	18-May	31-Oct	100	22
4904307	2077	N. Labarge Com	523	15-May	9-Jun	100	447
4904307	2077	N. Labarge Com	548	10-Jun	30-Jun	100	378
4904307	2077	N. Labarge Com	417	1-Jul	5-Oct	100	1330
4904307	2077	N. Labarge Com	548	6-Oct	15-Oct	100	180
4904334	2163	O Neil Ind	80	16-May	15-Jun	100	82
4904332	2079	S Piney PL Meadows	39	16-Sep	15-Oct	100	38
4904332	2074	S Piney Ranch Ind	61	1-Sep	15-Oct	100	90

The proposed range improvements would not be implemented.

The proposed administrative division of the North Labarge Common allotment would not occur.

Alternative 3 - No Grazing Alternative

Livestock grazing would no longer occur in any of the project allotments.

The proposed range improvements would not be implemented.

The proposed administrative division of the North Labarge Common allotment would not occur.

Alternatives Considered but Eliminated from Detailed Analysis

- The potential to combine all cattle into one herd and graze North Labarge Common according to a rest-rotation grazing system is not feasible given capacity of water facilities throughout the allotment. It is unlikely that any modification of existing water or development of new water sources could achieve the required balance between required water and available upland forage to implement a single-herd rotation.

AFFECTED ENVIRONMENT

Upland Range Condition

The dominant upland range site is shallow-loamy. The dominant grass species found on this site are indian ricegrass, needleandthread, Sandberg bluegrass, and thickspike wheatgrass. Other grass species that occur are bluebunch wheatgrass, bottlebrush squirreltail, and letterman needlegrass. The dominant shrub species are Wyoming big sagebrush, black sagebrush, low sagebrush, and low rabbitbrush. The most common forb species are various asters, phlox, and penstemon species. The western quarter of the project area is in higher elevation, forested habitats. This portion of the project area is characterized by deeper soils and higher annual precipitation values. As a result herbage production and cover are much higher than in the lower elevation sites.

Riparian Condition

There are 42.55 miles of lotic streams under BLM jurisdiction within the project area. Table 5 summarizes the PFC ratings for all reaches. Roughly 85% of all riparian areas are in proper functioning condition. Of those 15% functioning at risk (FAR), about 11% are in an upward trend and 2% did not show an apparent trend. There is a ¾ mile stretch of Sawmill creek that is classified as FAR with a downward trend and ¼ mile of Fogerty creek that is non-functioning. There are several contributing factors involved with the FAR rating for Sawmill creek and Fogerty creek :

PFC	Miles	% of Total
FAR-DOWN	0.75	1.76%
FAR-NA	0.85	2.00%
FAR-UP	4.67	10.98%
NF	0.23	0.54%
PFC	36.05	84.72%
Grand Total	42.55	

Sawmill Creek (T28N R114W Sec. 22 & 23; Figure 4): When considering functioning condition of this section of Sawmill creek one must first consider its' minimal potential to form one distinct channel. This reach is characterized by a widening of the flood plain and several dramatic vegetation changes that include wet meadow, a well established aspen stand, and a remnant beeb willow community transitioning to a booth willow community. An expectation that this section will develop one distinct channel in any meaningful amount of time is unrealistic. However, this area does have the ability to more effectively buffer the hydrologic forces of moving water, thus enhancing soil stability, soil moisture holding capacity, and the landscape's ability to recover from natural or induced disturbances.

There are three contributing factors to this section of Sawmill creek rating FAR with a downward trend:

1. Exxon-Mobile owns a parcel of land adjacent to (upstream) of this reach that contains a natural spring. The company constructed a fishing pond sometime before 2006. This installation has modified the natural hydrologic cycle downstream by limiting downstream flow patterns.

2. A powerline was installed sometime within the last 10-15 years that crosses this reach just downstream of another natural spring. When the powerline was installed the right of way was simply bulldozed, removing all topsoil. Reclamation was inadequate to restore the natural hydrologic cycle which has further limited water recharge back into the stream channel and floodplain.
3. This reach is located near the eastern portion of Pine Grove pasture. When livestock are rotated from Big Mesa into Pine Grove they tend to congregate in this stream bottom, exacerbating the damage already done by limited water recharge into the system. The proposed action incorporates herding techniques designed to mitigate this grazing related impact.

The effects of factors 1 and 2 cannot be influenced with a change in grazing management. However, it is likely that the riparian area's ability to annually recover from the impacts of factor 3 has been detrimentally affected by factors 1 and 2. While there is no guarantee that a change in grazing management would result in improving riparian condition, an attempt at reducing annual effects from livestock is worth the effort.

Fogerty Creek (T28N R113W Sec. 17, 20, TR41; Figure 5): As illustrated in Figure 1 this section of Fogerty creek is severely impacted by industrial development associated with long-term oil and gas development. It is highly unlikely that any change in grazing management, including total removal of livestock, would result in any improvement in riparian function.

Livestock Grazing (Ranching Operations)

Cattle grazing has been a part of this landscape for at least 120 years. However, it was the passage of the Taylor Grazing Act in 1934 that implemented some form of managed grazing under an allotment-permittee system. The original forage allocation for the entire project area was about 26,500 animal unit months (AUM's). In the middle sixties this number was reduced by just under 40% to its' current allocation of 16,340 AUM's.

Wildlife

Sage grouse

Areas within the allotments contain suitable yearlong habitat for sage-grouse, including breeding sites (8 known leks within 2 miles of project area), nesting and brood rearing areas, and winter habitat. Lek count data (maintained by Pinedale BLM biologists) indicates a relatively stable trend in population on leks associated with these allotments.

Big game species

The allotments lie within crucial winter range, migration routes, and year round range for mule deer, pronghorn, elk, and moose. There are also several elk parturition areas within the project area. The following herd units are associated with these allotments: Wyoming Range Mule Deer, Sublette Pronghorn, Piney Elk, and Sublette Moose. Current data from the Wyoming Game and Fish Department indicates the Wyoming Range Mule Deer herd is below objective, although the herd is relatively stable. Pronghorn in the Sublette herd are above objective and recent efforts have been made to bring the population down to a more sustainable level. Elk in the Piney Herd Unit are currently above objective. Many of the elk winter on feedgrounds, but efforts are being made to encourage more elk to winter on native range. Moose have generally been declining in the Sublette herd but the trend has recently stabilized.

Other wildlife species

Suitable habitat exists for a variety of small mammals, migratory songbirds, raptors, and other nongame species. There is currently very little trend data associated with many of these species.

Threatened, Endangered, and Sensitive Species

There are known gray wolf denning areas within the Wyoming Range and the Gros Ventre Range. Elk are the primary food source for gray wolves. The Finnigan elk feedground is 3.2 miles north and the North Piney Creek elk feedground is 9 miles north of the project area. Gray wolves have been known to forage from feedground to feedground in the winter months when elk are being fed. Currently, there are no known depredations of livestock in these allotments attributed to gray wolves.

There are no sand dunes or areas that contain suitable habitat for blow-out penstemon. The BLM botany specialist has inventoried all of the suitable habitats within the Pinedale Field Office and has indicated that blowout penstemon is not present nor does the Field Office contain suitable habitat to maintain blowout penstemon.

To date there are no known white-tailed prairie dog towns within any of these allotments. This area has been block-cleared for the presence of black-footed ferrets by the United States Fish and Wildlife Service (USFWS) and the Wyoming Game and Fish Department (WGFD).

There are forested wetlands within the North LaBarge Common allotment however, this habitat occurs between 8,000 and 9,000' elevation, which is beyond the elevation requirements for the Ute ladies' tresses orchid.

The North LaBarge Common allotment is within the Birch South Beaver Lynx Analysis Unit and contains foraging habitat suitable for Canada lynx however, BLM lands are outside of the designated critical habitat for Canada lynx. The habitat in these allotments are not considered the primary habitat used by Canada lynx historically, but has traditionally contained large enough snowshoe hare populations to support lynx.

This area is within the Colorado River drainage system, however, there are no water developments proposed in relation to these grazing permit renewals. In addition, this area is not tied to the drainage contain Kendall warm springs dace, and any future water developments will have no impact on these fish.

While yellow-billed cuckoo habitat exists within the project area the only sighting of yellow-billed cuckoo occurred several miles south at Seedskedee National Wildlife Refuge.

Cultural

An existing data review of BLM records of the permit area was conducted by BLM for this permit renewal. There has been a high amount of Class III inventory in the project area. Most formal inventory dates to the 1980's and 1990's, but continues into today. Both prehistoric and historic cultural resources are known and are abundant. Prehistoric sites include most site types known and include several prominent sites such as the Calpet Rock Shelter and Petroglyphs (48SU354, Listed on the NRHP), the Harrower Site, 48SU867, (excavated in 1984), both prehistoric and historic period biographic rock art sites such as 48SU2, the Big Chief Panel, the north Bird Canyon Petroglyphs, the Western Camp petroglyphs, literally hundreds of prehistoric camp sites, large mammal hunting, extraction and processing sites, rock alignment sites such as 48SU2363, human interments (such as at 48SU595), excavated house pits as at the Birch Creek House Pit Site, abundant dunal campsites, sites

found in alluvial deposits, spring-associated sites and lithic procurement locales. The western half of the allotment contains the majority of the rock alignments while dunal campsites are found throughout.

Historic sites are numerous. Historic sites include the oil field related town sites of Calpet, Western Camp, Ranibow Camp and many others; the first oil well was drilled in this area (Lackey #1). The Opal Wagon Road (48LN949, NRHP-Eligible) lies in this allotment. Other historic period sites known include several cabins, line shacks and other historic structures (tie hack, historic logging remains, early homesteads). Historic Aspen graffiti is known, some is recorded.

Both prehistoric and historic site potential is very high in the allotment. Past impacts include construction of numerous roads, wells, pipelines and power lines, fences, road upgrade (including portions of the Opal Wagon Road), vandalism of rock art and historic inscriptions, illegal artifact collection and local erosion. Direct grazing impact appears to be moderate but is documented. Grazing impacts to historic structures are known, as past range personnel have informed PFO cultural staff of cattle damage to historic structures. Grazing impact to riparian settings can threaten significant prehistoric cultural resources. Artifact collecting is the most common nonmitigated impact to cultural resources in this permit area.

ENVIRONMENTAL EFFECTS

Methodology

Rangeland Condition and Ranching Operations (Livestock Grazing)

The three major analysis components for the description of impacts are upland range condition, riparian condition, and livestock grazing/ranch operations. The Wyoming Standards for Rangeland Health provide guidance and rationale for determining sustainability of livestock grazing as related to upland and riparian condition and provide indicators with which to measure such impacts. As such, the range of alternatives were evaluated based on their expected impacts to said indicators.

Wildlife and Threatened, Endangered, and Sensitive Species

Impact analyses and conclusions are based on knowledge of resources in the planning area, a review of existing literature, and the professional judgment of experts within and outside the BLM. Spatial analysis was conducted using ESRI's ArcGIS Desktop 9.1 computer software. In the absence of quantitative data, best professional judgment was used. Impacts are sometimes described using ranges of potential impacts or in qualitative terms if appropriate.

Cultural

An existing data review of BLM records, coupled with the field office archaeologist's knowledge of the permit area was conducted by the BLM-PFO Cultural Resource Specialist.

Assumptions

- Grazed bunchgrasses are more nutritious and able to maintain vigor when grazed at moderate levels and when provided either ample opportunity to grow prior to use or have ample opportunity to grow after grazing (Holechek 1981, and McNaughton 1983).
- Livestock grazing has the potential to increase productivity of preferred vegetation species (Severson, 1990; Urness 1990)
- Livestock grazing has the potential to increase plant species diversity (Severson, 1990) and Urness, 1990)
- The BLM assumes that an adequate survey effort was conducted to ensure that black-footed ferrets were not present in an area before making the block-clearance determination.

Alternative 1 - Proposed Action (implement the North Labarge Area Grazing Plan)

Upland Range Condition

Direct and Indirect Effects

If plants are provided either ample opportunity to grow prior to use or have ample opportunity to grow after grazing then this alternative should have no long-term adverse impacts to maintaining a resilient plant community. Monitoring techniques that specifically target frequency of plant defoliation, intensity of defoliation, and a plant's opportunity to grow or regrow should be employed to insure that widespread overuse is not occurring (see monitoring recommendations). Such overuse would likely lead to a deterioration of range condition.

Construction of the Big Mesa drift fence should provide a higher degree of control over when and where livestock progress from east to west. In turn this should provide more flexibility in when cattle are rotated and allow for adjustments in timing and duration of grazing in order to achieve desired levels of rest for growing bunchgrasses.

Construction of the Chimney Butte pipeline will provide for more reliable levels of water in the Chimney Butte Pit #2. This pit has the capacity to water hundreds of cattle but when it dries up cattle must concentrate in other areas with more reliable water. This can result in overuse of the few areas with water and underuse of those areas without water. Constructing the pipeline should alleviate this issue.

Factors that can be measured to identify potential adverse impacts include GRI scores, changes in vegetative cover, and changes in plant community composition.

The same concepts that apply to maintaining resilient plant communities also apply to soil stability. Overuse from grazing can lead to loss of soil stability because the ability of vegetation to recover from disturbance is diminished. If the proposed seasons of use are appropriate for the landscape then soil stability should be maintained.

Factors that can be measured to identify potential adverse impacts to soil stability include GRI scores and changes in relative amount of bare ground.

Cumulative Effects

If widespread overuse were to occur and lead to deterioration of rangeland condition then this impact would be additive to the already adverse effects of widespread oil and gas activity on upland range condition. However, it is unlikely that removal of livestock from the area would in any way ameliorate those oil and gas related impacts.

Significance Determination

As long as widespread overuse of preferred vegetations species (especially bunchgrasses) does not occur the Proposed Action should have no significant impacts to the rangeland resource.

Riparian Condition

Direct and Indirect Effects

Riparian and wet meadow vegetation is capable of recovering from disturbance – given that the majority of the riparian areas within the project area are either meeting PFC or moving towards meeting PFC it is unlikely that the Proposed Action will contribute to degradation of these areas.

The initiation of herding cattle out of the north Sawmill drainage should alleviate those components of resource damage attributed to livestock use.

Cumulative Effects

If widespread overuse were to occur and lead to deterioration of rangeland condition then this impact would be additive to the already adverse effects of widespread oil and gas activity on riparian condition. However, it is unlikely that removal of livestock from the area would in any way ameliorate those oil and gas related impacts.

Significance Determination

As long as widespread overuse of preferred vegetations species does not occur the Proposed Action should have no significant impacts to the riparian resource.

Livestock Grazing

Direct and Indirect Effects

The Proposed Action should have no impact on currently allocated AUM's as there are no changes proposed.

Cumulative Effects

As there are no direct or indirect effects there should be no cumulative effects on currently allocated AUM's.

Significance Determination

The Proposed Action should have no significant impacts on ranching operations of affected permittees.

Wildlife

Direct and Indirect Effects

Sage grouse: Currently sage grouse successfully breed, nest, rear broods, and winter in these allotments. Implementation of the Proposed Action is expected to maintain these conditions.

Big Game Species: Potential impacts from livestock grazing in crucial winter range and transitional/migratory habitat can include competition for forage and water and spatial displacement. However, there is no evidence that indicates these impacts are occurring within the project area. The Proposed Action is expected to maintain current big game habitat conditions. The Big Mesa drift fence could potentially disrupt the mule deer migration through Dry Piney.

Other wildlife species: It is typically assumed that management practices that provide for healthy rangelands should directly or indirectly benefit most wildlife species. The proposed action is designed to provide for healthy rangelands in the project area and so is not expected to have impacts to other wildlife species.

Proposed Mitigation Measures

Incorporate a series of gates in the Big Mesa drift fence that can remain open (especially during spring and fall wildlife migrations) except when required to control livestock movements.

Residual Effects

If mitigation measures are implemented there should be no residual effects to wildlife of the proposed action.

Cumulative Effects

As there are no direct or indirect effects there should be no cumulative effects on discussed wildlife species.

Significance Determination

The Proposed Action should have no significant impacts on discussed wildlife species.

Threatened, Endangered, and Sensitive Species

Direct and Indirect Effects

These grazing permit renewals will have “no effect” on Utes ladies’-tresses, Kendall warm springs dace, blowout penstemon, bony tail, Colorado pike minnow, humpback chub, the razorback sucker and the black-footed ferret, due to the lack of suitable habitat or the block-clearance of suitable habitat.

These permit renewals “will not jeopardize the continued existence” of the yellow-billed cuckoo and the gray wolf due to the insignificant impacts these species may be subject to by continued grazing in this area. Grazing will be managed in riparian habitats to maintain or improve riparian health which will benefit yellow-billed cuckoo and increase nesting habitat potential and should also maintain Colorado River Cutthroat trout populations. Riparian habitats on BLM lands are meeting proper functioning conditions and grazing management will ensure that this status is maintained into the future. There are no known or historic depredations to livestock due to gray wolf activity within these allotments. The changes in grazing strategy should not change these conditions.

These grazing permit renewals “may affect, is not likely to adversely affect” due to insignificant impacts to Canada lynx. Livestock grazing within forested habitats containing snowshoe hares may create competition for forage in the hare’s winter habitats. However, this should not cause significant effects to the snowshoe hare’s caloric intake since they are opportunist foragers and livestock are only in these areas for a limited amount of time.

Cumulative Effects

This allotment currently contains significant habitat disturbance due to energy development. There is a proposal for an infill to the current development, which may increase disturbance to the habitats needed for these listed species; renewing these grazing permits should not increase the degradation of these habitats. If grazing conflicts arise/change the impacts determination, the analysis would be re-submitted to the USFWS for concurrence.

Significance Determination

This action will not have a significant impact to the federally listed species mentioned in the effects determination.

Cultural

Direct and Indirect Effects

The proposed action includes ground disturbing activities including subsurface water pipeline construction and the installation of a drift fence. The potentially destructive nature of these types of activities put cultural resources within the Area of Potential Effect (APE) at risk and will need to be analyzed on a case-by-case basis prior to the issuance of a NRHP Compliance form. Prior to any ground disturbing activities, including but not limited to the current proposed action, Class III cultural resource inventory will be conducted of the entire proposed project APE.

The effects of range improvements that enable rangeland health objectives will contribute to improved range conditions and vegetation stability. This would result in less soil erosion, which should help protect cultural resources.

Cumulative Effects

Assuming all required cultural surveys are conducted prior to ground disturbing activities there are no anticipated cumulative effects on cultural resources.

Significance Determination

As per the Pinedale RMP FEIS 2008; “Implementing healthy rangeland standards and achieving proper functioning condition (PFC) and rangeland health objectives would contribute to improved range conditions and soil and vegetation stability, thereby protecting cultural resources” (Pg. 4-12 FEIS for the Pinedale Field Office August 2008).

This determination comports with the BLM-PFO statutory obligations under the National Historic Preservation Act, FPLMA, the 2008 Pinedale Field Office RMP ROD and the BLM/WYSHPO State Protocol.

Beneficial and Adverse Impacts

The proposed change in use regarding turn-out timing and use of the allotments as part of the proposed action will not have any significant impacts to the cultural resources within the APE. The proposed action includes surface disturbing activities including subsurface water pipeline construction, reservoir construction and the installation of water storage tanks. Prior to any ground disturbing activities, including but not limited to the current proposed action, Class III cultural resource inventory will be required within the entire APE. Avoidance of cultural resources for project development is the preferred alternative in all cases. Subsurface discoveries that are the result of construction activities could potentially be mitigated through data recovery excavations.

Alternative 2 - No Action (no change) Alternative***Upland Range Condition****Direct and Indirect Effects*

Effects of Alternative 2 are similar to those of the proposed action except that potential benefits from proposed range improvements will not be realized.

Cumulative Effects

Potential cumulative effects of Alternative 2 are similar to those of the proposed action except that any benefits that may be realized from the proposed range improvements and that may counter any adverse effects from oil and gas development would not be realized.

Significance Determination

As long as widespread overuse of preferred vegetations species (especially bunchgrasses) does not occur Alternative 2 should have no significant impacts to the rangeland resource.

Riparian Condition*Direct and Indirect Effects*

Effects of the Alternative 2 are similar to those of the Proposed Action except that riparian condition in north Sawmill creek can be expected to deteriorate further in the absence of active herding of livestock out of that drainage.

Cumulative Effects

Potential cumulative effects of Alternative 2 are similar to those of the Proposed Action except that any benefits that may be realized from the proposed range improvements and that may counter any adverse effects from oil and gas development would not be realized.

Significance Determination

As long as widespread overuse of preferred vegetations species does not occur Alternative 2 should have no significant impacts to the riparian resource. Even if proposed range improvements in the Proposed Action were not implemented and this resulted in site specific deterioration of a specific riparian area this deterioration would not be considered a significant impact.

One approach to determining significant impact is to step out one level of space and/or time and consider if the site specific impact would also have an impact at the next largest scale. For example, if only one stream reach is deteriorated beyond meeting PFC but all others in the watershed are moving towards or meeting PFC there may not be a significant impact on the watershed of the one reach in question never meeting PFC. However, even if, based on this approach, this alternative does not have a significant impact, 43 CFR 4100 require the BLM to implement management changes when such changes will help move rangelands towards meeting the Wyoming Standards for Rangeland Health. This alternative is not consistent with that direction.

Livestock Grazing

Direct and Indirect Effects

Effects of Alternative 2 are the same as those of the Proposed Action.

Cumulative Effects

As there are no direct or indirect effects there should be no cumulative effects on currently allocated AUM's.

Significance Determination

Alternative 2 should have no significant impacts on ranching operations of affected permittees.

Wildlife

Direct and Indirect Effects

Anticipated effects of Alternative 2 are the same as those anticipated from the Proposed Action except that potential impacts to mule deer migration of the Big Mesa drift fence would not be realized and any benefits to vegetation from more intensive grazing management would not be realized.

Cumulative Effects

There are no anticipated cumulative effects on discussed wildlife species.

Significance Determination

Alternative 2 should have no significant impacts on discussed wildlife species.

Threatened, Endangered, and Sensitive Species

Direct and Indirect Effects

Anticipated effects of Alternative 2 are the same as those anticipated from the Proposed Action except that any improvement in habitat conditions realized from the Proposed Action would not occur.

Cumulative Effects

There are no anticipated cumulative effects on threatened, endangered, or sensitive species.

Significance Determination

Alternative 2 will not have a significant impact to the federally listed species mentioned in the effects determination.

Cultural

Direct and Indirect Effects

Cultural resource sites would not be disturbed because construction activities related to the proposed action would not occur. Continuation of the current healthy rangeland objectives would not result in any additional significant impacts to cultural resources as per established practice.

Cumulative Effects

There are no cumulative effects to cultural resources as a result of no change in range management to these allotments.

Significance Determination

The alternative of no change from current range management practices of these allotments would have no significant effect to the cultural resources located therein. Known significant cultural resources, such as 48SU595, have not been significantly impacted due the current range management practices.

Alternative 3 - No Grazing Alternative

Upland and Riparian Range Condition

Direct and Indirect Effects

Were all livestock grazing to be removed there would likely be a short term benefit to both riparian and upland vegetation condition. Riparian areas would have more opportunity to recover from potential adverse impacts of livestock and production of upland grass species would increase in the absence of grazing pressure. However, as discussed earlier, these vegetation species have evolved under grazing pressure and require light to moderate use in order to maintain vigor and remove decedent plant parts that can, over time, inhibit nutrient cycling through the ecological system. The long term impacts of livestock removal would be detrimental to overall ecological function and eventually lead to deteriorating wildlife habitat conditions. Furthermore, the removal of livestock could eventually lead to declining conditions that would result in those areas that currently meet Rangeland Health Standards not meeting those same standards in the future.

Cumulative Effects

In the short term it is possible that the removal of livestock grazing from the project area could ameliorate some of the adverse impacts of oil and gas development. This is especially true in riparian areas, where excessive road-building and poorly designed culverts are weakening some riparian areas and causing them to be less resistant to annual damage associated with livestock presence. However, in the long term it is unlikely that removal of livestock would be enough to overcome the damage caused by these roads and drainage issues.

Significance Determination

This alternative would have no short term significant impact on upland and riparian condition and would probably not have any long term significant impacts on upland and riparian condition.

Livestock Grazing

Direct and Indirect Effects

This alternative would have severe impacts to associated ranching operations that are dependent on public land forage for almost half of their annual production cycle. It is likely that, were ranches to lose their grazing privileges, at least some (if not all) operators would go out of business. If that were to occur, the private land associated with those ranches could be subdivided and sold and would cease to provide any wildlife habitat values.

Cumulative Effects

Cumulative effects on ranching operations are difficult to determine and may be irrelevant beyond the devastating direct and indirect effects to affected ranches.

Significance Determination

This alternative would have a significant impact on affected permittees as it would likely result in at least some of the operators going out of the ranching business. It would not have a significant impact on the Sublette county or Wyoming ranching industry unless it was used to set a precedent for other permit renewal decisions. This alternative is not consistent with Pindale RMP direction.

Wildlife

Direct and Indirect Effects

Under Alternative 3 wildlife might see an immediate benefit if competition from livestock for key resources was eliminated. However, there are also long term benefits from grazing, such as increased palatability of grazed vegetation, which wildlife would not realize. Some wildlife species would find a niche in an ungrazed environment, and would benefit from Alternative 3 in the long term. However, as long as grazing practices result in compliance with Wyoming Standards for Rangeland Health, the ecosystem as a whole should be healthy and provide suitable habitat for the majority of wildlife that exist or could potentially exist in the associated allotments.

Cumulative Effects

There are no anticipated cumulative effects on discussed wildlife species.

Significance Determination

Alternative 3 should have no significant impacts on discussed wildlife species.

Threatened, Endangered, and Sensitive Species

Direct and Indirect Effects

Were all livestock grazing to be removed there would be no depredation conflicts with gray wolves or competition for resources with snowshoe hares.

Cumulative Effects

There are no anticipated cumulative effects on threatened, endangered, or sensitive species.

Significance Determination

Alternative 3 will not have a significant impact to the federally listed species mentioned in the effects determination.

Cultural

Direct and Indirect Effects

The direct effect of a no grazing alternative would be a reduction to potential impacts to cultural resources from livestock trampling (particularly in areas of high site probability combined with sediments that are susceptible to livestock trampling such as riparian or wetland areas). An indirect effect would be that cultural resource sites exposed by erosion due to livestock would no longer be available for investigation.

Cumulative Effects

Continuing oil and gas activity in the area is a potential threat to cultural resources but can also lead to discovery of those resources. As grazing activity can also lead to uncovering cultural resources, this component would be eliminated under Alternative 3.

Significance Determination

As per the Pinedale FO 2008 FEIS, “Alternately, cattle trails and other heavily trampled and exposed areas could unearth otherwise undetected cultural resources and allow them to be identified and record.” (Pg. 4-12). This sole purported benefit to cultural resources by livestock would end if the no grazing alternative were to occur.

Issues Summary

	Issues (referenced from Pg 2)						
Alternatives	Riparian Condition	CO River Cutthroat Trout Habitat Condition	Ungulate Migration	Livestock/Ungulate Forage Competition (if occurring)	Sage Grouse Nesting Habitat	Socioeconomic	Consistent With Pinedale RMP or 43CFR4100
Proposed Action	positive impact	positive or neutral impact	neutral	neutral	neutral	neutral	Yes (both)
No Change	<i>negative or neutral impact</i>	<i>negative or neutral impact</i>	neutral	neutral	neutral	neutral	Yes (RMP) No (43CFR4100)
No Grazing	positive impact	positive impact	neutral	positive impact	positive impact	<i>negative impact</i>	No (both)

Monitoring

If grazing continues in the project area the monitoring plan described in the North Labarge Area Grazing Plan will be implemented. If grazing were to cease in the project area a modified monitoring plan that focused less on impacts of grazing and more on general vegetation trends would be implemented.

RMP DIRECTION AND CONSISTENCY

The allotments contain lands identified as suitable for domestic livestock grazing in the Pinedale RMP and continued domestic livestock grazing is consistent with the management goals, objectives, and actions in the Pinedale RMP (pg 2-17 – 2-18, Pinedale RMP ROD).

The Pinedale RMP, which directs the management of lands contained within this project area, has as one its goals to “maintain and/or enhance livestock grazing opportunities and rangeland health”.

Alternative 2, the “No Change” alternative, is not consistent with 43 CFR 4100 guidance. Alternative 3, the “No Grazing” alternative, is not consistent with the Pinedale RMP.

“Management actions associated with livestock grazing would have both direct and indirect impacts on cultural resources. Implementing healthy rangeland standards and achieving proper functioning condition (PFC) and rangeland health objectives would contribute to improved range conditions and soil and vegetation stability, thereby protecting cultural resources” (Pg. 4-12 FEIS for the Pinedale Field Office August 2008).

TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

- Affected grazing permittees
- Wyoming Department of Agriculture
- Wyoming Game and Fish Department
- Western Watersheds Project

LIST OF PREPARERS

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Jessica C Pettee	Rangeland Management Specialist	Upland and Riparian Rangeland Health, ID Team Lead, Grazing Administration
Rusty Kaiser	Wildlife	Wildlife Biologist
Lisa Solberg	Threatened, Endangered, and Sensitive Species	Wildlife Biologist
Rob Schweitzer	Cultural	Archeologist
Shelly Gregory	Planner	Planning, NEPA Consistency

REFERENCES

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- ES-61411/W.02/WY9721d- Biological Opinion for the Wyoming Bureau of Land Management Resource Management Plans and their Effects to the Black-footed Ferret, January 10, 2006
- BLM- Statewide Programmatic Biological Assessment: Blowout Penstemon (*Penstemon haydenii*)- August 2005
- ES-61411/W.02/WY9669c-Biological Opinion for the Wyoming Bureau of Land Management Resource Management Plans and their Effects to the Canada Lynx, August 9, 2005
- ES-61411/W.02/WY8797- Biological Opinion for the Wyoming Bureau of Land Management Resource Management Plans and their Effects to the Gray Wolf, March 21, 2005
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- Severson, K. E. 1990. Summary: Livestock grazing as a wildlife management tool. p. 3-6 *In:* K. E. Severson. Can Livestock Be Used As a Tool to Enhance Wildlife Habitat. Gen. Tech Rep. RM-194. U.S. Forest Service, Rocky Mountain Experiment Station, Fort Collins, CO.
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- Wyoming Standards for Rangeland Health,
http://www.blm.gov/wy/st/en/programs/grazing/standards_and_guidelines/standards.html

Figure 1

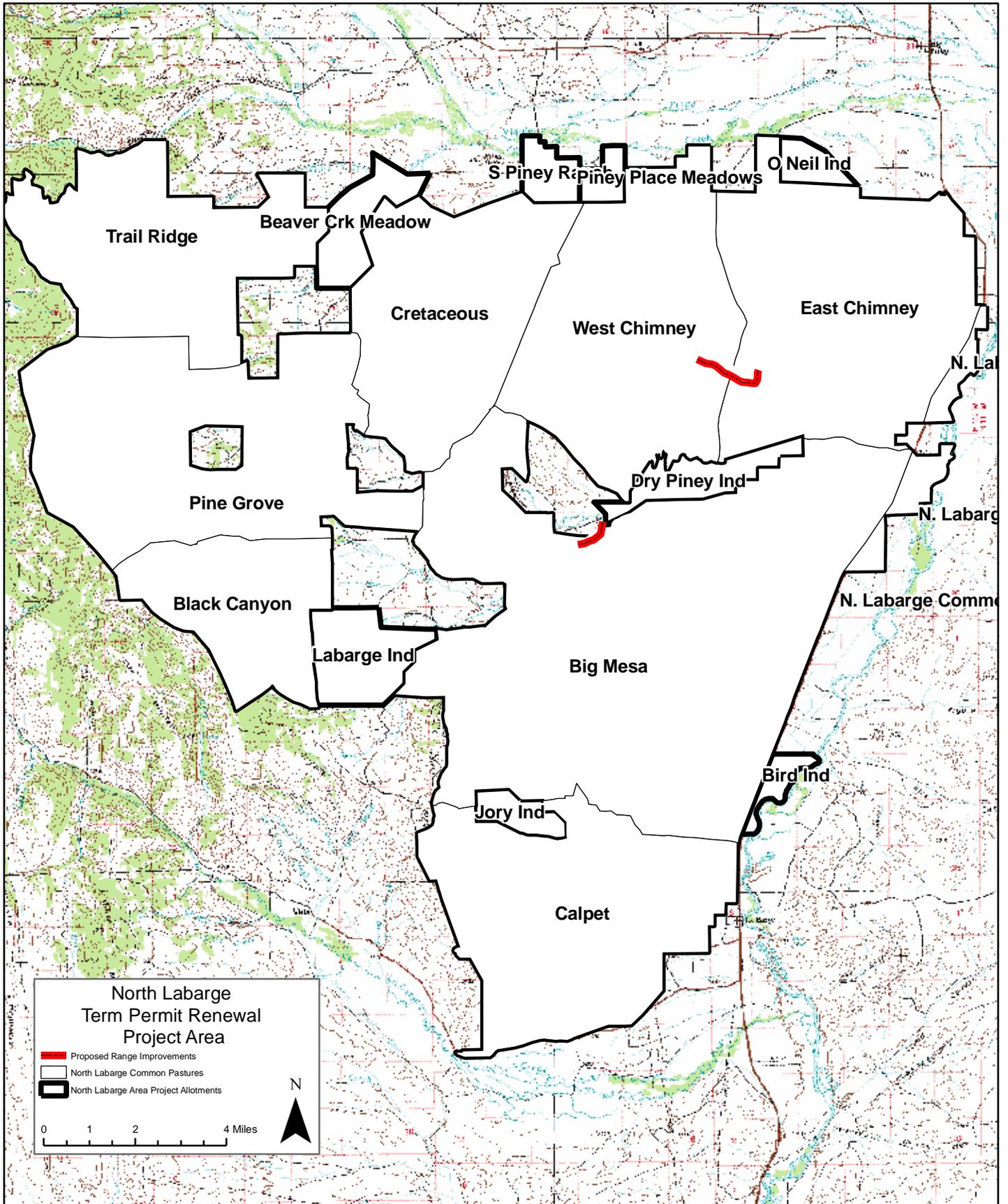


Figure 2

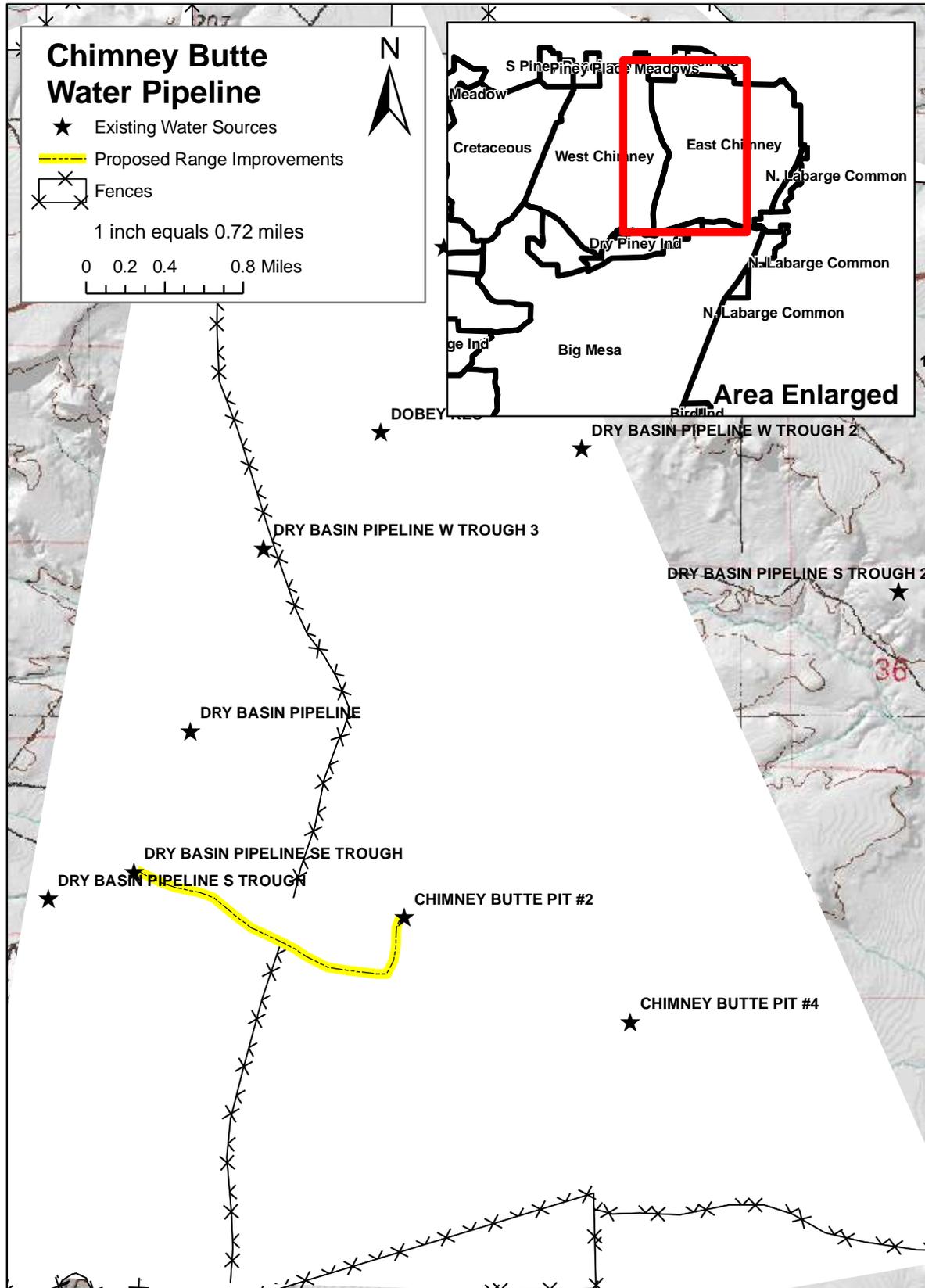


Figure 3

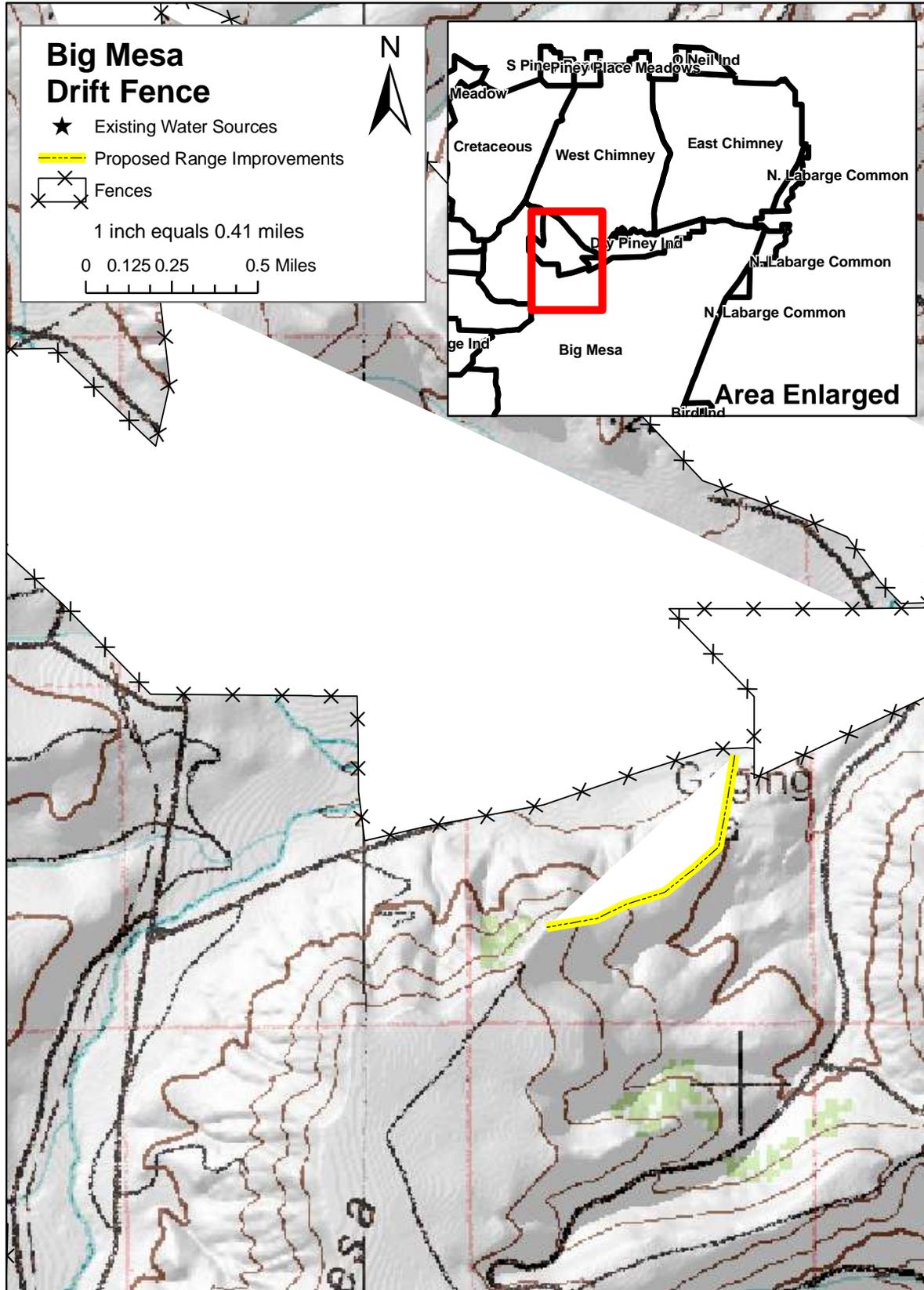


Figure 4

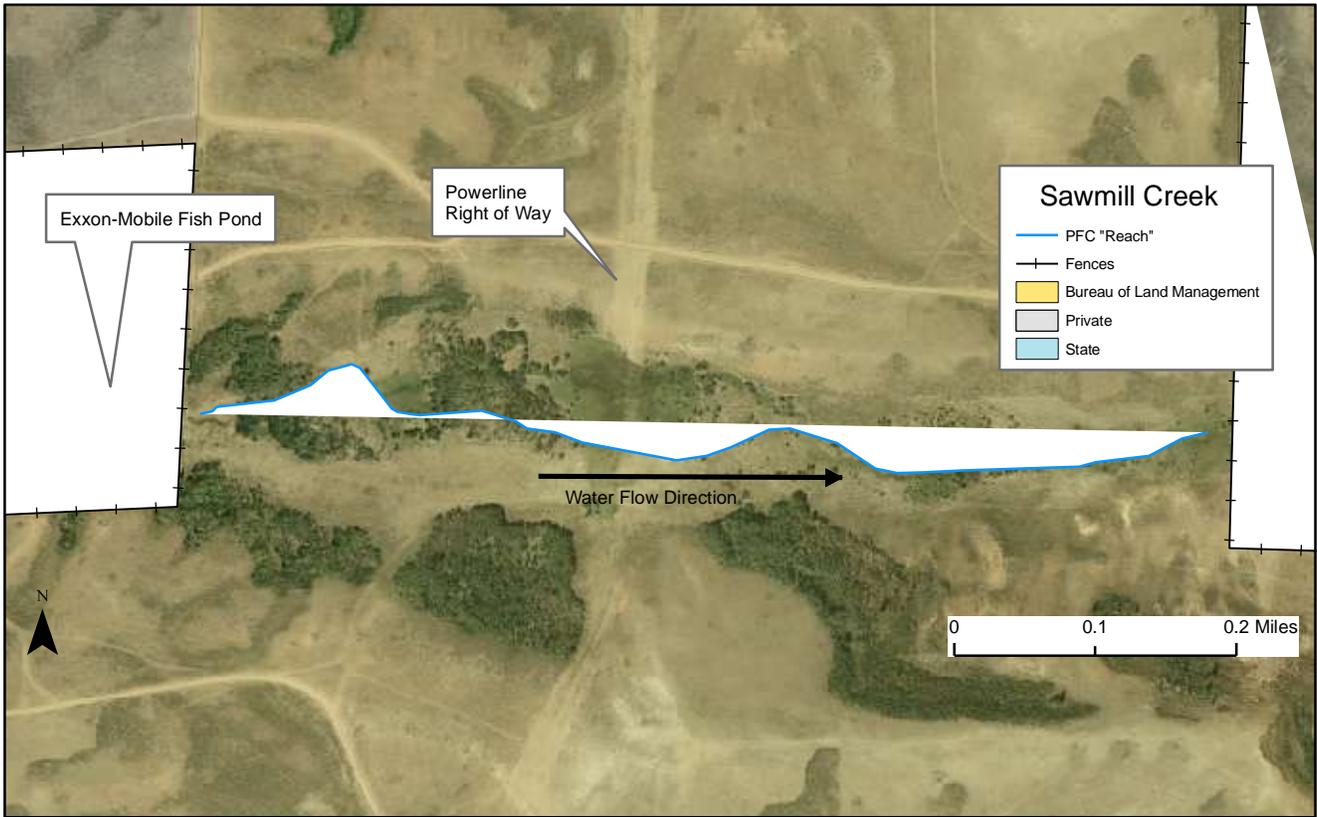


Figure 5

