UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District Office
Three Rivers Resource Area
Finding of No Significant Impact

Juniper Ridge Well Pipeline and Trough
Environmental Assessment
DOI-BLM-OR-B050-2010-0017-EA

INTRODUCTION

The Three Rivers Resource Area of the Burns District Bureau of Land Management (BLM) has prepared an Environmental Assessment (EA) proposing to install a new pipeline and trough in the South Pasture of Juniper Ridge Allotment #07016.

Juniper Ridge Allotment is located 30 miles west of Burns, Oregon, in Harney County and is managed by the Three Rivers Resource Area of the Burns District BLM. The allotment contains 23,330 acres of BLM-managed land, 2,074 acres of private land, 326 acres of State of Oregon land, and 81 acres owned by the USDA-ARS. The allotment is divided into the North and South Pastures containing 6,811 and 16,519 acres of BLM-managed land, respectively.

One permittee is authorized for 1,385 AUMs annually in the South Pasture. The 1998 Juniper Ridge Allotment Management Plan (AMP) planned for a graze (March 15 to May 31)/defer (June 15 to September 15) grazing rotation within the South Pasture. The only potential water sources in this 16,500-acre pasture are seven lakebed waterholes that hold water on an intermittent basis and almost never hold water during drought years or years of low winter snowpack, and one trough that is serviced by a well on USDA-ARS owned land that borders the allotment to the west. As a result, livestock grazing is limited to early spring grazing on years when these waterholes contain water. Any grazing that occurs past the middle of June is usually concentrated within 1-mile of the trough along the western allotment boundary. On years scheduled for deferred grazing, the permittee usually takes majority (70 percent) nonuse or completely rests the South Pasture.

SUMMARY OF THE PROPOSED ACTION

The Proposed Action is to construct approximately 0.7-mile of buried pipeline and install a 10-foot diameter bottomless (or two 1,500-gallon aluminum) water trough(s) within the South Pasture of Juniper Ridge Allotment. The pipeline and trough would be located in T. 24 S., R. 26 E., Sections 3 and 4. The proposed pipeline would start at the existing Juniper Ridge Well in the North Pasture of Juniper Ridge Allotment and be installed up and on top of Juniper Ridge along the northern boundary of the South Pasture. The project would not result in an increase in AUMs during the authorized period of use, nor would it alter season of use specified in the AMP.

Construction of the pipeline would consist of burying 2-inch black, plastic pipe to a depth of approximately 30 inches with a ripper tooth mounted to a dozer from the well to the base of Juniper Ridge (approximately 0.5-mile). The pipeline would then be hand laid and covered with rock to limit sunlight exposure going up and over Juniper Ridge. Plumbing of the proposed trough would be decided during project implementation. The system used would include either a 5,000-gallon storage tank and float valve at the trough, or an overflow pipe from the trough. Installation of the pipeline and trough would take approximately 5 days to complete and would occur from July through October of 2010. The Proposed Action would also replace the two existing troughs located at Juniper Ridge Well. These troughs are beginning to rust and spill water. Two 1,500-gallon aluminum troughs would be located within the same footprint of the existing troughs.

FINDING OF NO SIGNIFICANT IMPACT

Consideration of the Council on Environmental Quality (CEQ) criteria for significance (40 CFR 1508.27), both with regard to context and intensity of impacts, is described below:

Context

The Proposed Action would occur in Juniper Ridge Allotment and would have local impacts on affected interests, lands, and resources similar to and within the scope of those described and considered in the Three Rivers Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS). There would be no substantial broad societal or regional impacts not previously considered in the PRMP/FEIS. The actions described represent anticipated program adjustments complying with the Three Rivers RMP/Record of Decision (ROD), and implementing range management programs within the scope and context of this document.

Intensity

The CEQ's ten considerations for evaluating intensity (severity of effect):

1. *Impacts that may be both beneficial and adverse.* The EA considered potential beneficial and adverse effects. Project Design Features were incorporated to reduce impacts. None of the effects are beyond the range of effects analyzed in the Three Rivers PRMP/FEIS.

   Biological Soil Crusts: Biological soil crusts (BSCs) within a 50-foot radius (0.18-acre) of the proposed trough site would be reduced overtime, due to livestock congregation. Approximately 0.68-acre of localized BSC disturbance would occur as a result of burying the proposed pipeline. However, these impacts would be reduced by reseeding, and soil stability would return to pre-disturbance condition within 5 years after construction. Loss of BSC around existing water sources would be reduced as livestock distribution improves.

Grazing Management/Rangelands: Providing an additional reliable water source would allow management to further implement the graze/defer rotation called for in the 1998 AMP. Under this rotation, herbaceous plants would be provided growing season rest every other year within this pasture. Under this rotation, rangeland conditions would be maintained or improved. Providing an additional water source would improve livestock distribution and utilization levels would decrease around the few existing water sources within the South Pasture.

Migratory Birds: Construction activities would take place after the nesting season (April to June) to reduce disturbance to nests. Observed nests would be avoided, but some birds may still be flushed off nests or out of the immediate area during construction. Approximately 0.68-acre of vegetation between the well and proposed trough would be disturbed during pipeline installation. Seeding the disturbed area would aid in recovery of this area. Some bird species may expand or increase use of the area with the addition of a water source, but overall densities are not likely to substantially increase since the nearest water source is less than a mile and most birds can easily travel this distance.

Noxious Weeds: Approximately 0.18-acre around the new trough would experience increased ground disturbance due to livestock congregation, which could provide more opportunities for noxious weed introduction and spread. Approximately 0.68-acre of localized ground disturbance (soil displacement/vegetation trampling) would occur from installing the pipeline, which could lead to establishment of weeds in these areas. However, this disturbance would be localized minimal and risk of weed establishment would be reduced by incorporating project design features. By providing an additional water source, livestock distribution throughout the pasture may become more dispersed, which would reduce the level of disturbance at the existing water sources, reducing opportunities for new weed introduction and spread.

Soils: Soils within a 50-foot radius (0.18-acre) of the proposed trough site would become compacted overtime, due to livestock congregation. Approximately 0.68-acre of localized soil disturbance would occur as a result of burying the proposed pipeline. However, these impacts would be reduced by reseeding, and soil stability would return to pre-disturbance condition within 5 years after construction. Localized soil disturbance around existing water sources may be reduced as livestock distribution improves.

Special Status Species: Laying the pipeline and installing the trough would create temporary ground disturbance (0.68-acre) in the Project Area, and kill or damage some sagebrush plants along the route. However, the pipeline would cross through low sagebrush habitat, which would decrease the potential disturbance to the tall sagebrush habitat primarily used by pygmy rabbits. The pre-work surveys, narrow area affected, and the temporary nature of the disturbance from the project are designed to mitigate potential effects to pygmy rabbits.

The proposed trough location is near a narrow belt of juniper and more than a mile from known leks, reducing the potential disturbance to sage-grouse during the breeding season.

The new trough would increase livestock use in the northern portion of the South Pasture, especially in the years that are scheduled for deferred grazing. Utilization of bunchgrass species in the pasture would remain below target utilization levels, and sagebrush cover and distribution in the South Pasture would not be affected. Sage-grouse habitat would not change.

Upland Vegetation: Sagebrush and herbaceous vegetation would be trampled by equipment within 8 feet of the proposed pipeline (0.68-acre); however, these impacts would be temporary and vegetation would recover within 3 years after construction. Vegetation within 20 feet of the proposed trough would be completely removed to level the trough site. Sagebrush and herbaceous vegetation would be disturbed from livestock congregation within a 50-foot radius around the proposed trough (0.18-acre). Increased utilization on herbaceous vegetation would occur within the 1.5-mile service area of the new trough location; however, utilization would remain at or below the 50 percent the target use level and forage species would continue to receive growing season rest at least every other year. Utilization levels would be reduced around existing water sources, as livestock distribution would improve with an additional water source.

Wildlife: Providing an additional, reliable water source may increase use of the area by some species traveling from adjacent habitat or increase survival and productivity of species currently in the area. No fences would be constructed, and the pipeline would be buried along the route across the flats; therefore, the project would not create barriers to wildlife movement. Effects for highly mobile species that travel long distances would be undetectable, but smaller, less agile species may benefit with the additional water source as it would reduce their travel distance to water.

2. Degree to which the Proposed Action affects public health and safety. No aspect of the Proposed Action or alternatives would have an effect on public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. No unique characteristics are known to exist within the proposed Project Area.

4. The degree to which effects on the quality of the human environment are likely to be highly controversial. Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the Proposed Action or preference among the alternative. No unique or appreciable scientific controversy has been identified regarding the effects of the Proposed Action or No Action Alternative.

5. Degree to which possible effects on the human environment are highly uncertain or involve unique or unknown risks. The analysis has not shown there would be any unique or unknown risks to the human environment nor were any identified in the Three Rivers PRMP/FEIS.

6. Degree to which the action may establish a precedent for future actions with significant impacts or represents a decision in principle about a future consideration. This project neither establishes a precedent nor represents a decision in principle about future actions. No long-term commitment of resources causing significant impacts was noted in the EA or RMP.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. The environmental analysis did not reveal any cumulative effects beyond those already analyzed in the Three Rivers PRMP/FEIS which encompasses Juniper Ridge Allotment. The EA described the current state of the environment (Affected Environment by Resource, Chapter III) which included the effects of past actions. No reasonably foreseeable future actions were identified in the analysis area.

8. Degree to which the action may adversely affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places. There are no known features within the Project Area listed or eligible for listing in the National Register of Historic Places.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat. There are no known threatened or endangered species or their habitat affected by the Proposed Action or alternative.

10. Whether an action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. The Proposed Action does not threaten to violate any law. The Proposed Action is in compliance with the Three Rivers RMP, which provides direction for the protection of the environment on public lands.

On the basis of the information contained in the EA and all other information available to me, it is my determination that:

1. The implementation of the Proposed Action or alternative will not have significant environmental impacts beyond those already addressed in the Three Rivers PRMP/FEIS (September 1991);

2. The Proposed Action and alternative are in conformance with the Three Rivers RMP/ROD;

3. There would be no adverse societal or regional impacts and no adverse impacts to affected interests; and

4. The environmental effects, together with the proposed Project Design Features, against the tests of significance found at 40 CFR 1508.27 do not constitute a major Federal action having a significant effect on the human environment.

Therefore, an EIS is not necessary and will not be prepared.

Richard Roy Three Rivers Resource Area Field Manager	Date

JUNIPER RIDGE WELL PIPELINE AND TROUGH

Environmental Assessment
DOI-BLM-OR-B050-2010-0017-EA

Bureau of Land Management
Burns District Office
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JUNIPER RIDGE WELL
PIPELINE AND TROUGH

ENVIRONMENTAL ASSESSMENT
DOI-BLM-OR-B050-2010-0017-EA

CHAPTER I: INTRODUCTION: PURPOSE OF AND NEED FOR ACTION

A. Introduction

The Three Rivers Resource Area of the Burns District Bureau of Land Management (BLM) is proposing to install a new pipeline and trough in South Pasture of Juniper Ridge Allotment #07016.

1. Overview of Juniper Ridge Allotment

Juniper Ridge Allotment is located 30 miles west of Burns, Oregon, in Harney County and is managed by the Three Rivers Resource Area of the Burns District BLM (Map A). The allotment contains 23,330 acres of BLM-managed land, 2,074 acres of private land, 326 acres of State of Oregon land, and 81 acres owned by the USDA-ARS. The allotment is divided into the North and South Pastures containing 6,811 and 16,519 acres of BLM-managed land, respectively (Map B).

Three Term Grazing Permits authorize 2,076 Animal Unit Months (AUMs) of Permitted Active Use for cattle on the allotment from March 15 to September 15 each year. Other forage allocations on the allotment include 38 AUMs for wildlife.

2. Rangeland Health Assessment

A BLM Interdisciplinary Team (IDT) completed an assessment of rangeland health standards during a 2000 Juniper Ridge Allotment Evaluation. The BLM IDT's rangeland health assessment for Juniper Ridge Allotment determined:

- Rangeland Health Standard #1 (Watershed Function – Uplands) is being achieved. Current livestock management is maintaining soil surface stability, and trend in rangeland condition is either stable or upward across the allotment.
- Rangeland Health Standard #2 (Watershed Function – Riparian/Wetland Areas) is not present. All streams in the pasture are ephemeral.
- Rangeland Health Standard #3 (Ecological Processes) is being achieved. Light utilization levels have left adequate ground cover for soil stability and moisture infiltration. Plant communities represented are capable of carrying out site processes.
- Rangeland Health Standard #4 (Water Quality) is not present.

- Rangeland Health Standard #5 (Native, Threatened and Endangered and Locally Important Species) is being achieved. The grazing system in place provides opportunities for sage-grouse nesting and brood rearing habitat.

Utilization of herbaceous vegetation in South Pasture has remained light (<40 percent) every year since the 2000 evaluation.

B. Purpose of and Need for Action

1. Background

One permittee is authorized for 1,385 AUMs annually in South Pasture. The 1998 Juniper Ridge Allotment Management Plan (AMP) planned for a graze (March 15 to May 31)/defer (June 15 to September 15) grazing rotation within South Pasture. The only potential water sources in this 16,500-acre pasture are seven lakebed waterholes that hold water on an intermittent basis and rarely hold water during drought years or years of low winter snowpack and one trough serviced by a well on USDA-ARS owned land that borders the allotment to the west. As a result, livestock grazing is limited to early spring grazing on years when these waterholes contain water. Any grazing that occurs past the middle of June is usually concentrated within 1-mile of the trough along the western allotment boundary. On years scheduled for deferred grazing, the permittee usually takes majority (70 percent) nonuse or completely rests South Pasture. Over the past 6 years, livestock use has averaged 427 AUMs or 30 percent of the Permitted Active Use (1,385 AUMs) authorized for South Pasture.

2. Purpose and Need

Since the 1998 AMP, monitoring has indicated an additional source of reliable water for livestock is needed to further implement the graze/defer grazing rotation called for in the 1998 AMP. The purpose of the action is to provide a reliable water source within South Pasture to further implement the 1998 AMP.

3. Resource Management Plan Goals/Objectives/Management Actions

The objective of this project is to provide a reliable water source to further implement the current grazing rotation. The Action Alternative must meet the project objectives listed below, from the 1992 Three Rivers Resource Management Plan (RMP) direction:

- Utilize rangeland improvements, as needed, to support achievement of multiple-use management objectives (Grazing Management Program, 1992 Three Rivers RMP Page 2-36). The Rangeland Program Summary (RPS) of the RMP identifies that there are potentially 8 miles of pipeline and eight troughs to be completed within Juniper Ridge Allotment, which would help the allotment move toward the management objectives defined in the RMP (Appendix 14. Potential Range Improvements, 1992 Three Rivers RMP Page 185). To date, no pipeline has been constructed within the allotment.

- Maintain or improve rangeland condition and productivity through a change in management practices and/or reductions in active use to address the current range condition, level, or pattern of utilization (Appendix 9. Allotment Management Summaries, 1992 RMP Page 131).

- Implement a rotation or deferred grazing system on all allotments within big game ranges (Wildlife Habitat, Three Rivers RMP Page 2-66).

4. Decision to be Made

The Three Rivers Resource Area Field Manager is the responsible official who will decide which alternative analyzed in this document best meets the purpose and need for action based on the interdisciplinary analysis presented in the Environmental Assessment (EA). The Field Manager will decide whether or not to construct range improvements and identify construction specifications of range improvements and measures (terms and conditions).

C. Scoping and Issues

Internal scoping through a BLM IDT generated resource issues pertinent to the proposed project. Table 1 (Chapter III) displays resources considered by the IDT. The potential impacts to resources affected by all alternatives are fully analyzed in the environmental consequences section.

D. Land Use Plan Conformance

The Proposed Action has been designed to conform to the Three Rivers RMP/Record of Decision/RPS (September 1992). The Proposed Action, although not specifically provided for, is consistent with the RMP management actions identified above under the Purpose and Need for Action.

E. Conformance with Laws, Regulations, and Policy

The Proposed Action has been designed to conform to the following documents, which direct and provide the framework and official guidance for management of BLM lands within the Burns District:

- Taylor Grazing Act (43 U.S.C. 315), 1934
- National Environmental Policy Act (NEPA) (42 U.S.C. 4321-4347), 1970
- Federal Land Policy and Management Act (43 U.S.C. 1701), 1976
- Public Rangelands Improvement Act (43 U.S.C. 1901), 1978
- Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington,1997
- Burns District Noxious Weed Management Program EA (OR-020-98-05), 1998
- Bureau of Land Management National Sage-grouse Habitat Conservation Strategy, 2004
- Greater Sage-grouse Conservation Assessment and Strategy for Oregon, 2005
- Juniper Ridge AMP, 1998
- State, local, and Tribal laws, regulations, and land use plans

CHAPTER II: ALTERNATIVES INLUDING THE PROPOSED ACTION

A. No Action Alternative

The pipeline and trough would not be installed, and no additional water source would be established in the South Pasture. Current livestock management would continue within the same season of use with the same number of permitted AUMs.

B. Proposed Action

The Proposed Action is to construct approximately 0.7-mile of buried pipeline and install a 10-foot diameter bottomless (or two 1,500-gallon aluminum) water trough(s) within South Pasture of Juniper Ridge Allotment. The pipeline and trough would be located in T. 24 S., R. 26 E., Sections 3 and 4. The proposed pipeline would start at the existing Juniper Ridge Well in the North Pasture of Juniper Ridge Allotment and be installed up and on top of Juniper Ridge along the northern boundary of the South Pasture (Map B). The project would not result in an increase in AUMs during the authorized period of use, nor would it alter grazing management specified in the AMP.

Construction of the pipeline would consist of burying 2-inch black plastic pipe to a depth of approximately 30 inches with a ripper tooth mounted to a dozer from the well to the base of Juniper Ridge (approximately 0.5-mile). The pipeline would then be hand laid and covered with rock to limit sunlight exposure going up and over Juniper Ridge. Plumbing of the proposed trough would be decided during project implementation. The system used would include either a 5,000-gallon storage tank and float valve at the trough, or an overflow pipe from the trough. Installation of the pipeline and trough would take approximately 5 days to complete and would occur from July through October of 2010. A backhoe or dozer would be used level the trough site and backfill around the new trough(s).

The BLM would furnish the materials, survey and design, and labor to install the pipeline and trough. A Cooperative Agreement for Rangeland Improvements would be generated after construction, which would place future maintenance responsibility of the pipeline and trough with the permittee within the South Pasture. The following project design elements would be followed during project implementation:

(1) Proposed project site would be inventoried for cultural resources prior to implementation. National Register eligible sites would be avoided through project modification and if avoidance is not possible, mitigation measures would be developed in consultation with the State Historic Preservation Office.
(2) Proposed project site would be surveyed for Special Status plant species prior to implementation. Special Status plant sites would be avoided.
(3) Special Status wildlife species (terrestrial and avian) habitat would be protected during proposed range improvement project implementation.
(4) No range improvement projects would be constructed within 0.6-mile of known sage-grouse lek sites.
(5) Proposed range improvement sites would be surveyed for noxious weed populations prior to implementation. Weed populations identified in or adjacent to the proposed projects would be treated using the most appropriate methods in accordance with the Burns District Noxious Weed Management Program EA/Decision Record (DR) OR-020-98-05.
(6) The risk of noxious weed introduction would be minimized by ensuring all equipment (including all machinery, 4-wheelers, and pickup trucks) is cleaned prior to entry to the sites, minimizing disturbance activities, and completing follow-up monitoring, to ensure no new noxious weed establishment. Should noxious weeds be found, appropriate control treatments would be performed in conformance with the Burns District Noxious Weed Program Management EA/DR OR-020-98-05.
(7) The grazing permittee would be responsible for all range improvement maintenance.
(8) All watering troughs installed would be equipped with escape ramps for birds and small mammals.
(9) Reseeding would take place in areas disturbed by implementation of rangeland improvement projects. Soil displaced for pipeline installation would be pulled in and returned to original slope and grade then seeded with a whirly bird seeder and drag. The seed mix used for these rangeland improvement projects would be a mixture of native and nonnative species including crested wheatgrass, bluebunch wheatgrass, squirreltail, and native forbs (flax or yarrow).

The Proposed Action would also replace the two existing troughs located at Juniper Ridge Well. These troughs are beginning to rust out and spill water. Two 1,500-gallon aluminum troughs would be located within the same footprint of the existing troughs. A backhoe would be used to replace and backfill around the new troughs.

C. Alternatives Considered but not Fully Analyzed

The IDT considered drilling a new well near the proposed trough site. This alternative was not fully analyzed because the cost of drilling a well on Juniper Ridge is unknown, but would likely be 3 to 4 times the cost of the proposed pipeline. Additionally, the success of finding reliable water through drilling a new well is speculative, due to the elevated topography, and rocky terrain on Juniper Ridge. Therefore, it is unknown whether such an alternative would meet the purpose and need of this project.

CHAPTER III: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

A. Description of the Affected Environment and Environmental Consequences

An IDT has reviewed and identified issues and resources affected by the alternatives. The following table summarizes the results of that review. Affected resources are in bold.

Table 1. Resources/Issues Identified for Analysis

Resources/Issues	**Status**	**If Not Affected, why? If Affected, Reference Applicable EA Section**
Air Quality (Clean Air Act)	Not Affected	Dust would be produced briefly during pipeline construction. These impacts would not be measureable.
American Indian Traditional Practices	Not Present	No concerns have been disclosed.
Areas of Critical Environmental Concern	Not Present	
Cultural Resources	Not Affected	Proposed project site would be inventoried for cultural resources prior to implementation. National Register eligible sites would be avoided through project modification and if avoidance is not possible, mitigation measures would be developed in consultation with the State Historic Preservation Office.
Environmental Justice (Executive Order 12898)	Not Affected	The Proposed Action is not expected to have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations as such populations do not exist within the Project Area.
Flood Plains (Executive Order 13112)	Not Present	The Proposed Action does not involve occupancy and modification of flood plains, and would not increase the risk of flood loss.
Greenhouse Gas Emissions	Not Affected	Fuel consumption associated with constructing the proposed project would result in carbon dioxide emissions. Approximately 60 gallons of gasoline would be consumed during installation of the project.

Resources/Issues		Status	If Not Affected, why? If Affected, Reference Applicable EA Section
			This emission would be so small that its incremental contribution to national and global emissions would not be measurable at the level of precision of the global and national emissions. This emission would be so small that it would not merit reporting under the Environmental Protection Agency rule on mandatory reporting of greenhouse gases, which presents a reporting threshold of 25,000 metric tons of carbon dioxide equivalent (40 CFR 98.2).
Hazardous or Solid Waste		Not Present	
Noxious Weeds (Executive Order 13112)		**Affected**	See Chapter III
Paleontological Resources		Not Present	
Prime or Unique Farmlands		Not Present	
Migratory Birds (Executive Order 13186)		**Affected**	See Chapter III
Wildlife/ Threatened or Endangered (T/E) Species or Habitat	Fish	Not Present	No perennial or fish-bearing streams flow through the pasture.
	Wildlife	Not Present	No Federal T/E animal species are known or suspected to occur in the Project Area.
	Plants	Not Present	No Federal T/E plant species are known or suspected to occur in the Project Area.
Wildlife/BLM Special Status Species and Habitat	Fish	Not Present	No perennial or fish-bearing streams flow through the pasture.
	Wildlife	**Affected**	*greater sage-grouse* –**Affected**. See Chapter III *pygmy* rabbit – **Affected**. See Chapter III *SSS bats* – **Affected**. See Chapter III
	Plants	Not Present	No BLM Special Status plant species have been detected, nor are any suspected to occur based on known habitat associations. In addition, proposed project site would be surveyed for Special Status plant species prior to implementation. Special Status plant sites would be avoided.
Water Quality		Not Present	No surface water is present in the pasture.
Wetlands/Riparian Zones (Executive Order 11990)		Not Present	No perennial streams or riparian areas exist within the allotment.
Wild and Scenic Rivers		Not Present	
Wilderness/Wilderness Study Areas		Not Present	
Wilderness Characteristics		Not Present	
Grazing Management		**Affected**	See Chapter III
Recreation		Not Affected	No changes to general recreational setting or access routes would occur.
Soils/Biological Crusts		**Affected**	See Chapter III
Upland Vegetation		**Affected**	See Chapter III

Resources/Issues	Status	If Not Affected, why? If Affected, Reference Applicable EA Section
Visual Resources	Not Affected	The Project Area is Visual Resource Management (VRM) Class III. The Proposed Action would result in a slight change in the landscape character, but would not dominate the view of the casual observer, as consistent with VRM III objectives.
Social and Economic Values	Not Affected	No changes to customary social or economic values would occur.
Wildlife	**Affected**	See Chapter III

1. Noxious Weeds

Affected Environment:

There are currently no known infestations of noxious weeds in the Project Area. This general area is known to be free of weeds. There are a number of weed infestations along the Highway Rights-of-Way on the north and east sides of the allotment, as well as in the adjacent allotment to the west. Chickahominy Reservoir is just to the north and is infested with weeds. These include Russian, spotted, and diffuse knapweeds, perennial pepperweed, and Mediterranean sage. If any new populations of noxious weeds are found during the site-specific clearances for the project, they would be treated using the best available methods prior to initiating the project.

Environmental Consequences:

No Action: This alternative would not involve any new disturbance, thereby reducing the risk of new weed introductions at a specific location. The existing water sources would continue with the level of use they are currently receiving.

Proposed Action: The Proposed Action would provide a water source where there currently is not one. This could lead to livestock concentrations in an area not currently receiving that level of use. Approximately 0.18-acre around the new trough would experience increased ground disturbance due to livestock congregation, which provides more opportunities for noxious weed introduction and spread. On the other hand, by providing an additional water source, livestock distribution throughout the pasture would become more dispersed, which would reduce the level of disturbance at the existing water sources, reducing opportunities for new weed introduction and spread.

Approximately 0.68-acre of localized ground disturbance (soil displacement/vegetation trampling) would occur from installing the pipeline, which could lead to establishment of weeds in these areas. However, this disturbance would be reduced by incorporating project design features.

For the purposes of this analysis, the cumulative effects analysis area for noxious weeds is at the allotment scale. The only reasonably foreseeable future activity affecting noxious weeds is ongoing monitoring and treatment of noxious weeds under EA-OR-020-98-05. No noxious weeds have been documented around existing water developments within the allotment. There would be no measureable effects to noxious weeds from replacing the existing troughs at Juniper Ridge Well.

2. Vegetation

Affected Environment:

The vegetation within the Project Area consists primarily of Wyoming big sagebrush/Thurber's needlegrass and big sagebrush/Idaho fescue in the North Pasture around Juniper Ridge Well. At the proposed trough site, vegetation is comprised of low sagebrush/Idaho fescue/Sandberg's bluegrass. A mix of pre (prior to 1870) and post (after 1870) settlement western juniper exists on Juniper Ridge.

There are no known species of Special Status plants within the allotment. Monitoring has occurred to identify the presence or absence of *Allium brandegei*. It was not found to be present within the allotment.

Environmental Consequences:

No Action: There would be no direct or indirect impacts to vegetation under this alternative. Utilization would continue to be concentrated around existing water sources.

Proposed Action: Sagebrush and herbaceous vegetation would be trampled by equipment within 8 feet of the proposed pipeline (0.68-acre); however, these impacts would be temporary and vegetation would likely recover within 3 years after construction. Vegetation within 20 feet of the proposed trough would be completely removed to level the trough site. Sagebrush and herbaceous vegetation would be disturbed from livestock congregation within a 50-foot radius around the proposed trough (0.18-acre).

Increased utilization of herbaceous vegetation would occur within the 1.5-mile service area of the new trough location; however, utilization would remain at or below the 50 percent target use level and forage species would continue to receive growing season rest at least every other year. Utilization levels would be reduced around existing water sources, as livestock distribution would improve with an additional water source.

For the purposes of this analysis, the cumulative effects analysis area for vegetation is at the allotment scale. Past ground-disturbing projects that have affected vegetation within the allotment include the construction of 13 waterholes/reservoirs and 1 well which have resulted in approximately 3.25 acres of total vegetation loss. The proposed project, combined with past projects would total 3.5 acres (.00015 percent of allotment acreage) of vegetation loss. There would be no measureable effects on vegetation from replacing the existing troughs at Juniper Ridge Well.

3. Soils/Biological Soil Crusts

Affected Environment:

Soils in the area consist of two general soil series: Raz-Brace-Anawalt and Ninemile-Westbutte-Carryback. The former occurs at the eastern most end of the proposed pipeline through the Anawalt Lonely soil series (5 to 30 percent slopes) while the latter occurs through the remainder of the proposed pipeline and trough areas. The trough location is within the Ninemile; Reluctan soil series (0 to 15 percent slopes) and the remainder of the proposed pipeline runs through Westbutte; Lambring; Rock outcrop (35 to 65 percent slopes).

Rangeland Health Standard #1 (Watershed Function – Uplands) is being achieved. Current livestock management is maintaining soil surface stability, and trend in rangeland condition is either stable or upward across the allotment. Rangeland Health Standard #3 (Ecological Processes) is being achieved. Light utilization levels have left adequate ground cover for soil stability and moisture infiltration. Plant communities represented are capable of carrying out site processes.

Although the Project Area has not been surveyed for Biological Soil Crusts (BSCs), one may infer from the achievement of Standards 1 and 3 that soil surface stability and BSC cover is adequate for purposes of achieving and maintaining upland and ecological function. Coupled with the light utilization of the South Pasture for the last 9 years, this leads to the conclusion that soil and BSC conditions are in good shape outside of small site-specific areas where herbivore concentration occurs (existing water sources).

Low sagebrush communities (more dominant at the proposed trough location) generally support later seral BSC communities than Wyoming or basin big sagebrush communities due to well armored rocky soils, and the large Fire Return Interval (~100 to 200 years) typical for this plant community.

Environmental Consequences:

No Action: There would be no direct or indirect impacts to soil under this alternative; however, livestock congregation around existing water sources would not be reduced.

Proposed Action: Soils and BSCs within a 50-foot radius (0.18-acre) of the proposed trough site would become compacted over time, due to livestock congregation. Approximately 0.68-acre of localized soil and BSC disturbance would occur as a result of burying the proposed pipeline. However, these impacts would be reduced by reseeding, and soil stability would likely return to pre-disturbance condition within 5 years after construction. Localized soil disturbance and loss of BSC around existing water sources may be reduced as livestock distribution improves.

For the purposes of this analysis, the cumulative effects analysis area for soils/BSCs is at the allotment scale. Past ground-disturbing activities which had the potential to affect soils/BSCs within the allotment include the construction of 13 waterholes/reservoirs, 1 well, and livestock congregation around these water sources. These activities have resulted in approximately 3.25 acres of localized soil compaction/displacement. The proposed project, combined with past activities would total 3.5 acres (.00015 percent of allotment acreage) of soil compaction/displacement. There would be localized soil disturbance (compaction/displacement) resulting from replacing the existing troughs at Juniper Ridge Well. However, these effects would be contained within the original footprint of the existing troughs which is already disturbed.

4. Rangelands/Livestock Grazing Management

Affected Environment:

The proposed trough site is located within the South Pasture of Juniper Ridge Allotment. The 1998 AMP plans for a graze (March 15 to May 31)/defer (June 15 to September 15) rotation within this pasture. However, due to lack of reliable water, livestock grazing past July is typically unfeasible. The permittee generally uses this pasture from mid-March through the end of June. Any grazing that occurs past June is serviced by the trough along the western allotment boundary. Over the past 6 years, livestock use has averaged 427 AUMs or 30 percent of the Permitted Active Use (1,385 AUMs) authorized for South Pasture.

Environmental Consequences:

No Action: The grazing rotation planned for in the 1998 AMP would not be fully implemented, as lack of water does not facilitate grazing past July in most years. The permittee would continue to take partial nonuse or complete rest within South Pasture. Livestock distribution would not improve and utilization would remain concentrated around the limited existing water sources.

Proposed Action: Providing an additional reliable water source would allow management to implement the graze/defer rotation called for in the 1998 AMP. Under this rotation, herbaceous plants would be provided growing season rest every other year within this pasture. Under this rotation, rangeland conditions would be maintained or improved. Providing an additional water source would improve livestock distribution and utilization levels would decrease around the existing water sources within South Pasture. Replacing the existing troughs at Juniper Ridge Well would have no additional effects on Livestock Grazing Management.

5. Migratory Birds

Affected Environment:

Migratory bird species use suitable habitat in this allotment for nesting, foraging, and resting as they pass through on their yearly migrations; however, no formal monitoring for migratory birds has been conducted on this allotment. Habitat in the allotment consists primarily of low sagebrush grasslands, big sagebrush grasslands, and a narrow, elevated juniper-sagebrush ridge extending from the northwest corner to the eastern boundary of the allotment. Migratory birds use all habitats in the Project Area with some birds being habitat specific while others use a variety of habitats. Species associated strongly with sagebrush include Brewer's sparrow (*Spizella breweri*), sage thrasher (*Oreoscoptes montanus*), loggerhead shrike (*Lanius ludovicianus*), and sage sparrow (*Amphispiza belli*). Woodland species include gray flycatcher (*Empidonax wrightii*), northern flicker (*Colaptes auratus*), American kestrel (*Falco sparverius*), western wood-peewee (*Contopus sordidulus*), and chipping sparrow (*Spizella passerine*). Species often found in two or more habitats include American robin (*Turdus migratorius*), brown-headed cowbird (*Molothrus ater*), lark sparrow (*Chondestes grammacus*), and western meadowlark (*Sturnella neglecta*). Nest locations vary by species with some species being ground nesters, while others prefer to nest in shrubs or trees.

Environmental Consequences:

No Action: There would be no disturbance to migratory birds or their habitat. Potential for increased use or expansion of some migratory bird habitat would not be realized.

Proposed Action: Construction activities would take place (July to October) after the nesting season (April to June) to reduce disturbance to nests. Ground and shrub nesting species, such as sage thrasher and loggerhead shrike, would have the greatest risk of disturbance. Observed nests would be avoided, but some birds may still be flushed off nests or out of the immediate area during construction. Approximately 0.68-acre of vegetation between the well and proposed trough would be disturbed during pipeline installation. Seeding the disturbed area would aid in recovery of this area. Some bird species may expand or increase use of the area with the addition of a water source, but overall densities are not likely to increase since the nearest water source is less than a mile and most birds can easily travel this distance.

Season of livestock use would not change under this project, but the additional water source may increase use along the northern portion of the allotment. However, maintaining utilization at or below target utilization levels set for the allotment would continue to maintain adequate plant species and structural diversity for migratory birds. Escape ramps would be installed in the troughs to prevent potential drowning. There would be no measureable effects on migratory birds from replacing the existing troughs at Juniper Ridge Well.

6. Special Status Species – Wildlife*:*

Affected Environment:

Greater sage-grouse (*Centrocercus urophaisanus*) are sagebrush obligates, and suitable habitat is present in the allotment. Two active leks (Juniper Ridge #1 and #2) are located approximately 1.3 to 1.5 miles south of the proposed trough. Three grouse were observed on this lek complex in 2004. No grouse were observed during surveys in 2009. Rangeland conditions are currently meeting Rangeland Health Standards and Guidelines, and are adequate to meet the needs of sage-grouse in the allotment (Hagen 2005).

Pygmy rabbits (*Brachylagus idahoensis*) are sagebrush obligates, and require pockets or stands of tall sagebrush in order to survive. Sagebrush is their primary food source during the winter and comprises an important amount of their diet at other times of the year. Pygmy rabbits also dig their own burrows and require relatively deep, friable soils suitable for excavating and supporting their burrow system (Green and Flinders 1980). The allotment contains potential pygmy rabbit habitat, and pellets and possible burrows have been reported in the South Pasture (Foster 2005); however, pygmy rabbits have not been observed. Pygmy rabbits and burrows have also been reported approximately 4 miles northeast of the proposed project (Bartels 2003).

Fringed myotis (*Myotis thysanodes*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and spotted bat (*Euderma maculatum*) may also occur in the allotment, but have not been observed. These bat species typically use caves and mines for day roosts, but may also utilize crevices in rimrock and cliffs or human-made buildings and other structures in the area (Verts and Carraway 1998). These species may forage over juniper and sagebrush in the area, and drink from reservoirs or troughs in the area. Large or hollow juniper trees may provide night roosts for rest during foraging periods.

Environmental Consequences:

No Action:

Greater sage-grouse: No changes to grazing would occur and habitat quality would continue to meet sage-grouse requirements. Utilization would remain concentrated around the limited existing water sources. No trough would be installed, and lack of reliable late season sources of water in South Pasture would continue to limit grazing past June in most years. Disturbance during the nesting and brood-rearing periods would be minimal, especially in years scheduled for deferred grazing, due to low to moderate stocking rates.

Pygmy rabbits: There would be no disturbance to pygmy rabbits or potential habitat.

SSS bats: There would be no disturbance to SSS bats or their habitat. Potential for increased use or expansion of bat foraging habitat would not be realized.

Proposed Action:

Greater sage-grouse: The proposed location of the troughs is near the narrow belt of juniper and more than a mile from either lek, reducing the potential disturbance to sage-grouse during the breeding season (Hagen 2005). The new trough would increase livestock use in the northern portion of South Pasture, especially in the years scheduled for deferred grazing. Utilization of bunchgrass species in the pasture would remain below or at target utilization levels, and sagebrush cover and distribution in South Pasture would not be affected. Sage-grouse habitat would not change.

Sage-grouse are generally able to meet their water requirements through their diet, but open water may be used during extended periods of drought. However, sage-grouse would likely move out of this area during the driest periods of the year in search of more succulent forage. Coyote and other sage-grouse predator use may increase in response to a more reliable water source, but increased use would occur later in the season when most sage-grouse have left the area.

The Proposed Action does not include installation of any new fences or potential new raptor perches, and escape ramps would be installed in the new troughs. Potential impacts to sage-grouse and their habitat are expected to be undetectable.

Pygmy rabbits: Laying the pipeline and installing the trough would create temporary ground disturbance (0.68-acre) in the Project Area, and kill or damage some sagebrush plants along the route. However, the pipeline would cross through low sagebrush habitat, which may decrease the potential disturbance to the tall sagebrush habitat primarily used by pygmy rabbits. The end of the pipeline (0.2-mile) crosses steep, rocky, juniper covered habitat unsuitable or marginal for pygmy rabbits. Disturbance would be minimal because pygmy rabbits are primarily nocturnal, and construction activities would take place during the day. Pre-work surveys for pygmy rabbits would be completed to avoid potentially collapsing burrows along the route. The new water source would not benefit pygmy rabbits, but may benefit potential predators, such as raptors and coyotes. However, these highly mobile species are already present in the area and the addition of a water source 0.7-mile from an existing source would not increase their densities in the area. The pre-work surveys, area affected (0.68-acre), and the temporary nature of the disturbance from the project are designed to mitigate potential effects to pygmy rabbits.

SSS bats: No juniper trees would be cut, so potential roosting habitat would not be lost. Construction activity would take place in open sagebrush habitat away from cliffs and trees; therefore, disturbance at potential tree and cliff roosts would be minimal. The disturbance to vegetation along the pipeline would not measurably affect insect abundance or diversity; therefore, bat foraging habitat would be unaffected. Disturbance would be minimal because these bat species are primarily nocturnal, and construction activities would take place during the day. Bats drink frequently when foraging, and the additional water source may benefit bats by expanding their foraging area. Escape ramps would be installed in troughs to prevent potential drowning. No wires, posts, or other barriers would be installed over the water troughs, leaving a clear flight path for bats.

There would be no measureable effects on Special Status wildlife species from replacing the existing troughs at Juniper Ridge Well.

7. Wildlife

Affected Environment:

The primary vegetative communities in the allotment consist of low sagebrush grasslands, big sagebrush grasslands, and a narrow juniper-sagebrush ridge extending southeast from the northwest corner to the eastern boundary of the allotment. These vegetative communities provide habitat suitable for several species of wildlife, including mule deer (*Odocoileus hemionus*) and antelope (*Antilocapra americana*).

Other wildlife potentially present in the allotment are least chipmunk (*Tamias minimus*), coyote (*Canis latrans*), American badger (*Taxidea taxus*), sagebrush lizards (*Sceloporus graciosus*), and several bats, reptiles, and small mammals. South Pasture provides little water, especially later in the season, which may limit the movement through or use of the area by some of the less mobile wildlife species. The nearest reliable water sources would be the Juniper Ridge Well approximately 0.7-mile to the northeast and the trough near the west boundary of South Pasture.

Environmental Consequences:

No Action: No changes to grazing would occur, and habitat for wildlife would not change from existing conditions. Utilization would remain concentrated around the limited existing water sources. No water source would be created, and lack of reliable late season water sources in South Pasture may limit use of the area by some species.

Proposed Action: Providing an additional, reliable water source may increase use of the area by some species traveling from adjacent habitat or increase survival and productivity of species currently in the area. No fences would be constructed, and the pipeline would be buried across the flats; therefore, the project would not create barriers to wildlife movement. Effects for highly mobile species that travel long distances would be undetectable, but smaller, less agile species may benefit with the additional water source as it would reduce their travel distance to water. There would be no measureable effects on wildlife species from replacing the existing troughs at Juniper Ridge Well.

B. Cumulative Effects Analysis

As the Council on Environmental Quality (CEQ), in guidance issued on June 24, 2005, points out, the "environmental analysis required under NEPA is forward-looking," and review of past actions is required only "to the extent that this review informs agency decision-making regarding the Proposed Action." Use of information on the effects on consideration of the Proposed Action's cumulative effects, and secondly as a basis for past action may be useful in two ways according to the CEQ guidance. One is for identifying the Proposed Action's effects.

The CEQ stated in this guidance that "[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." This is because a description of the current state of the environment inherently includes the effects of past actions. The CEQ guidance specifies that the "CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions." Our information on the current environmental condition is more comprehensive and more accurate for establishing a useful starting point for a cumulative effects analysis, than attempting to establish such a starting point by adding up the described effects of individual past actions to some environmental baseline condition in the past that, unlike current conditions, can no longer be verified by direct examination.

The second area in which the CEQ guidance states that information on past actions may be useful is in "illuminating or predicting the direct and indirect effects of a Proposed Action." The usefulness of such information is limited by the fact that it is anecdotal only, and extrapolation of data from such singular experiences is not generally accepted as a reliable predictor of effects.

However, "experience with and information about past direct and indirect effects of individual past actions" have been found useful in "illuminating or predicting the direct and indirect effects" of the Proposed Action in the following instances: the basis for predicting the effects of the Proposed Action and its alternatives is based on the general accumulated experience of the resource professionals in the agency with similar actions.

The environmental consequences discussion described all expected effects including direct, indirect and cumulative on resources from enacting the proposed alternatives. A distinction between direct and indirect effects is not made and in many cases cumulative effects are only described as effects. All effects are considered direct and cumulative; therefore, use of these words may not appear. In addition, the Introduction Section of this EA, specifically the Purpose of and Need for Action, identifies past actions creating the current situation. No reasonably foreseeable future actions were identified within the cumulative effects analysis area by resource.

CHAPTER IV: CONSULTATION AND COORDINATION

A. List of Preparers

Bill Andersen, District Range Staff
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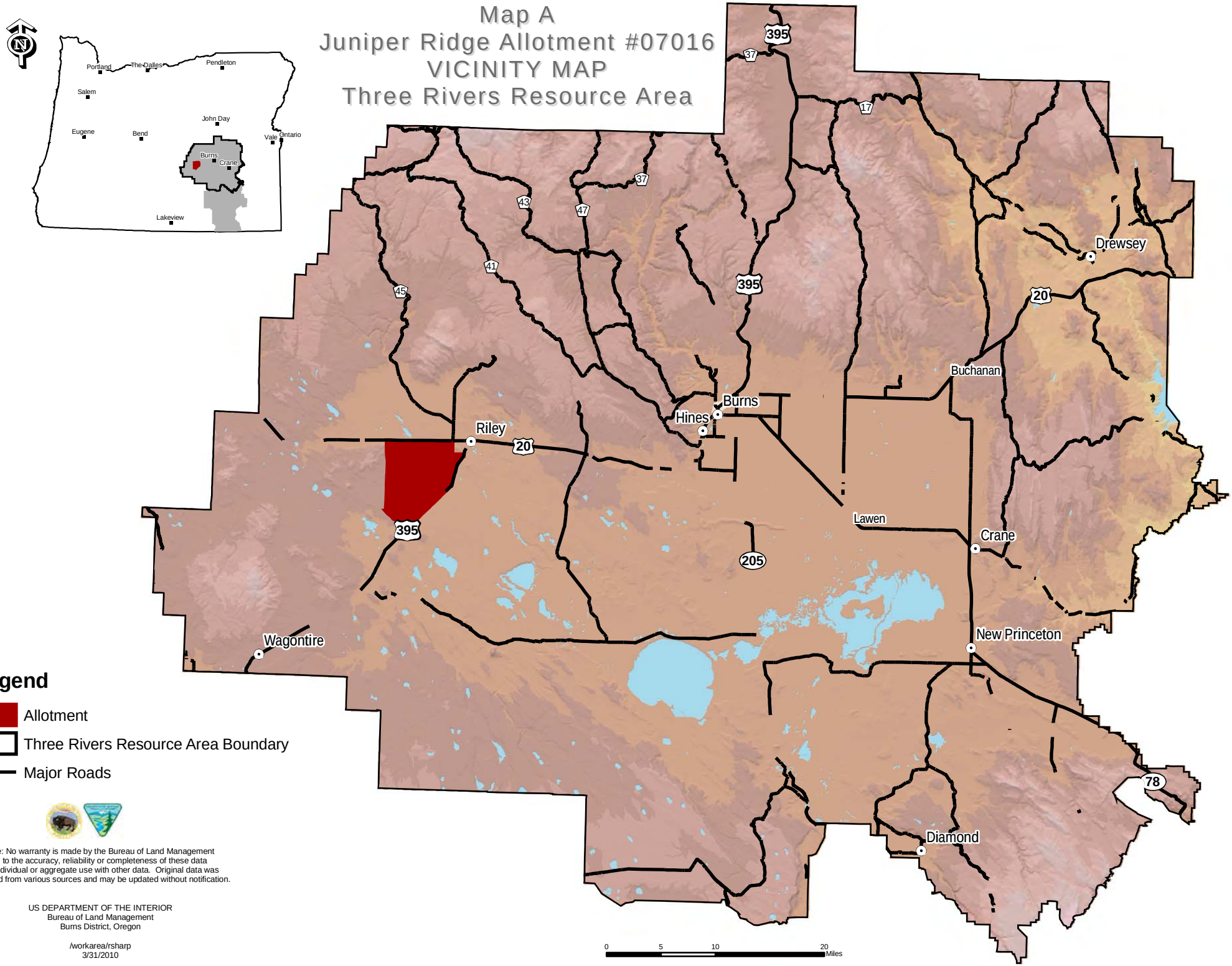
Rob Sharp, Rangeland Management Specialist (Lead Preparer)
Scott Thomas, Archaeologist

B. Persons, Groups, and Agencies Consulted

Harney County Court
Juniper Ridge Allotment Permittees
Oregon Department of Fish and Wildlife

Map A
Juniper Ridge Allotment #07016
VICINITY MAP
Three Rivers Resource Area



Legend

- Allotment
- Three Rivers Resource Area Boundary
- Major Roads

Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources and may be updated without notification.

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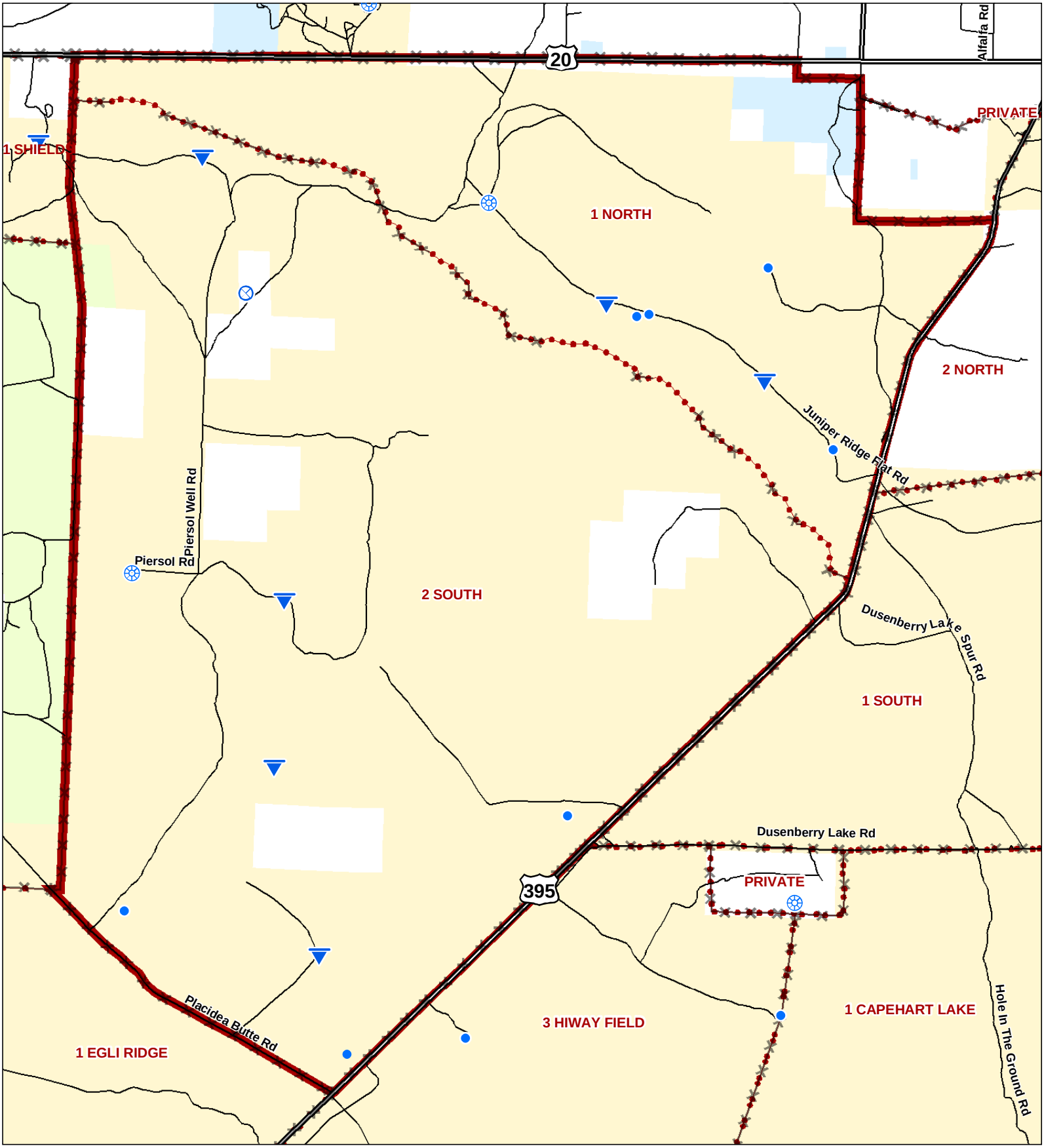
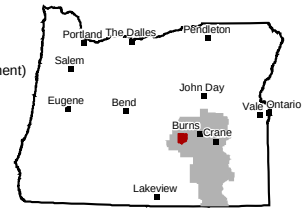
Map B

Juniper Ridge Allotment #07016
LAND STATUS



Legend

- Allotment Boundary
- Pasture Boundary
- Bureau of Land Management
- Private (White)
- State
- USDA (except Forest Service)
- Paved Road
- Non-Paved Improved Road
- Primitive or Unknown Road Surface
- FENCE
- DUGOUT
- POND
- RESERVOIR
- SPRING (spring development)
- TROUGH
- WATERHOLE
- WELL



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Map C

Juniper Ridge Well
Pipeline Extension

Legend

- Proposed Trough
- Proposed Pipeline

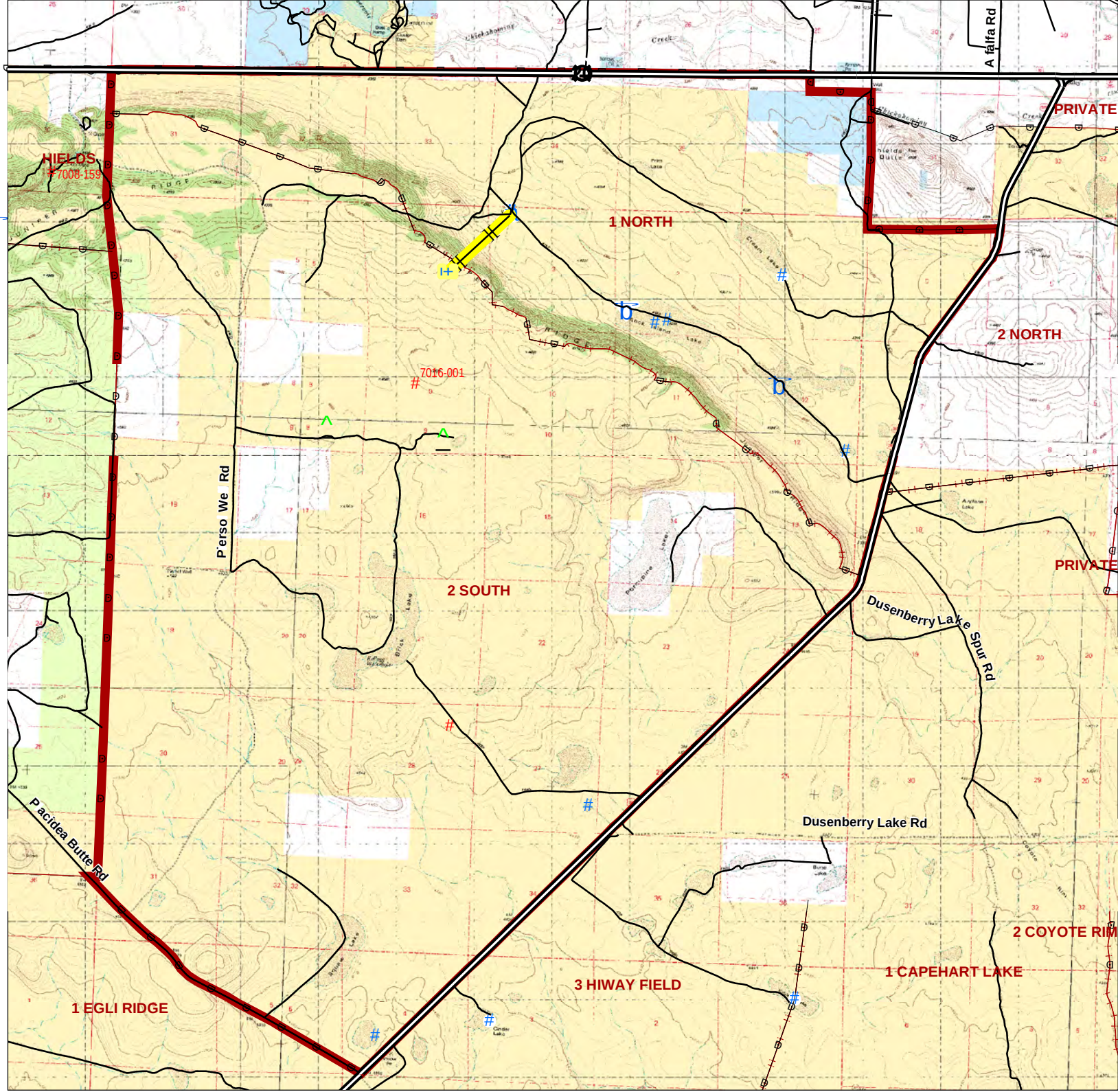
Range Impvt Points

- DUGOUT
- POND
- RESERVOIR
- TROUGH
- WATERHOLE
- WELL
- Pasture Boundary
- Paved Road
- Non-Paved Improved Road
- Primitive or Unknown Road
- Allotment Boundary

Ownership

Land Administration

- BLM
- Private
- State
- USDA-ARS



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