

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

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**Environmental Assessment**

**Thirty Mile Spring and South Butte Allotment Boundary Fence and  
the South Butte Well and Pipeline**

**June 2011**

**DOI-BLM-NV-L010-2011-0015-EA**

**PREPARING OFFICE**

U.S. Department of the Interior  
Bureau of Land Management  
Egan Field Office  
HC 33 Box 33500  
Ely, NV 89301 United States  
775-289-1800





**Environmental Assessment:  
Thirty Mile Spring and South  
Butte Allotment Boundary  
Fence and the South Butte  
Well and Pipeline**

**June 2011**

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# **Chapter 1. Introduction**

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This document identifies issues, analyzes alternatives, and discloses the potential environmental impacts associated with the Thirty Mile Spring and South Butte Allotments Boundary Fence and the South Butte well, storage tanks, water pipelines and troughs. (Appendix A). The Bureau of Land Management (BLM) Egan Field Office proposes to authorize and construct an allotment boundary fence between the Thirty Mile Spring and the South Butte grazing allotments and authorize and construct a water well and pipelines on the South Butte allotment in cooperation with the livestock permittees on the Thirty Mile Spring and the South Butte grazing allotments. These range improvement projects were recommended to achieve the Standards and Guidelines for Nevada's Northeastern Great Basin Area, which were developed by the Northeastern Great Basin Resource Advisory Council (RAC).

## **1.1. Identifying Information:**

### **1.1.1. Title, EA number, and type of project:**

Thirty Mile Spring/South Butte Allotment Boundary Fence and South Butte Well and Pipeline.

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### **1.1.2. Location of Proposed Action:**

The following is the location of the proposed fence:

**T.19N. R. 61E. Sections: 16, 20, 21, 22, 27**

The following is the location of the proposed well, storage tanks, pipelines and troughs:

**T19N, R61E sections 3, 9, 10, 11, 13, 14.**

**T20N, R61E section 26.**

### **1.1.3. Name and Location of Preparing Office:**

Lead Office - Egan Field Office, LLNVL01000

HC 33 Box 33500

Ely, NV 89301

### **1.1.4. Identify the subject function code, lease, serial, or case file number:**

### **1.1.5. Applicant Name:**

Sam and Clelia Henriod and John Uhalde & Co.

## **1.2. Purpose and Need for Action:**

The BLM's purpose for the proposed fence is to improve livestock management on the Thirty Mile Spring Allotment and the South Butte Allotment thereby help in progressing toward achieving the standards and guidelines for rangeland health as approved by Nevada's Northeastern Great Basin Resource Advisory Council. The need is to prevent unauthorized use and prevent livestock drifting from Thirty Mile Spring Allotment to the South Butte Allotment and conversely from the South Butte Allotment to the Thirty Mile Spring Allotment.

BLM's purpose for the well, storage tanks, water pipelines and troughs is to provide adequate, reliable water for livestock, and to improve livestock management throughout the South Butte and South Butte Seeding Allotments through better distribution and to create more flexibility in the use of both allotments and help continue progressing toward achieving the standards and guidelines for rangeland health as approved by Nevada's Northeastern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (1997). The need for the action is to prevent repeated or constant use or over use of vegetation in particular areas of the South Butte and South Butte Seeding allotments due to the lack of adequate, reliable water sources. The purpose and need for the action was brought forward in order to implement a management recommendation from the South Butte and South Butte Seeding Standards Determination Document (SDD) in order to increase livestock distribution and use flexibility throughout both allotments.

## **1.3. Scoping, Public Involvement and Issues:**

Internal scoping was conducted by a BLM interdisciplinary (ID) team on May 9, 2011 to identify any resource concerns or issues associated with the proposed action. The preliminary issues identified were how the alternatives would affect water resources.

An external scoping period from June 2, 2011 through June 17, 2011 allowed those publics interested in range improvements to comment on the proposed action. Comments were received from Western Watershed Project and were considered in the authoring of this EA.

A summary of the project was posted on the eGov for Planning and NEPA (ePlanning Front Office) website on February 1, 2011. No additional comments were received.

The preliminary EA was posted on the eGov for Planning and NEPA (ePlanning Front Office) website on January 11, 2012 for a 30 day public review. In addition, the preliminary EA was sent to those interested publics that requested information regarding range improvement projects on January 13, 2012 for a 30 day public review. Comments were received from Western Watersheds Project and were evaluated and considered.

# **Chapter 2. Proposed Action and Alternatives**

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## 2.1. Description of the Proposed Action:

The previous chapter presented the Purpose and Need for the proposed projects, as well as the relevant issues, i.e., those elements that could be affected by the implementation of the proposed project. To meet the purpose and need of the proposed projects in a way that resolves the issues, the BLM has developed alternatives. These alternatives, including a no action alternative, are presented below. The potential environmental effects resulting from the implementation of each alternative are then analyzed in Chapter 3 for each of the identified issues in Table 4.

### Proposed Action

The proposed action is to construct approximately 1.32 miles of fence along the boundary of the Thirty Mile Spring Allotment and South Butte Allotment. In addition to the fence, one well would be drilled with a pump, storage tank, and troughs located at T19N, R61E sec. 10, on the South Butte Allotment. Three pipelines, one additional storage tank and approximately 5 troughs would also be connected with this well. One pipeline would extend approximately 2 miles to the southeast of the proposed well with one trough, another pipeline would extend approximately 2 miles to the north of the proposed well with one trough and the other would extend approximately 1.5 miles to the west of the proposed well to a storage tank and trough inside the South Butte Seeding Allotment and then to a second trough outside of the seeding (Figure 1 (p. 43)). Authorization and construction of the well and pipeline would be contingent upon all title holders for the permit to comply with the State of Nevada Water Law. Construction activities for the project would not occur between November 1st to July 30th to avoid disturbance to most wildlife species. If any construction is necessary during that period, a survey of the areas to be disturbed would be completed prior to construction by a wildlife biologist. In addition, the areas to be disturbed for the fence, well, waterlines, roads and troughs would be surveyed for the presence of pygmy rabbits prior to construction, so that they may be avoided.

### Proposed Well and Pipelines

One well would be drilled by a licensed well driller using an appropriately sized well drilling rig. The well would be equipped with an electric submersible pump. The pump would be connected to an existing power line which is immediately adjacent to the well site by way of a buried line from the existing power line to the well, approximately 100 feet. A storage tank and water troughs would be located at the well site and would serve as an on-site water source for livestock. In addition, access to the well site would be by an existing two track road which is adjacent to the existing power line as well as an existing fence. The anticipated area of disturbance for the installation of the well, pump, storage tank and trough is estimated to be 1/4 acre. This disturbance would consist of driving over vegetation and possibly digging out an area for the storage tank. Pipeline construction would include installation of the pipelines below ground surface by trenching machinery (tractor with trencher attached or backhoe). The tractor with the trencher/backhoe would dig a trench approximately 8-12 inches wide and 3 feet deep for the length of each pipeline. This would equal approximately 2/3 acre of soil being dug out and replaced for all three pipelines. In addition to the trench, the tractor would run over the vegetation on either side of the pipelines for the length of each pipeline. This area of disturbance is anticipated to be approximately 10 feet wide (5 feet on each side of the pipeline). Two of the pipelines (east and

north) would be approximately 2 miles in length. This would be an approximate disturbance of 2.5 acres each. The final pipeline (west) would be approximately 1.5 mile in length. This would be an approximate disturbance of 2 acres. The installation of the storage tank and trough along the west pipeline, inside the South Butte Seeding Allotment, would disturb approximately 1/4 acre and would be in a previously used water hauling site. The trough at the end of the west pipeline, outside of the South Butte Seeding, would also be located at a previously disturbed site which has been used as a water hauling site. The proposed pipelines would deliver water by gravity flow from the storage tanks to the water troughs. A “booster” pump may be installed at the well site by the permittee if needed to push the water from the well uphill to the second storage tank inside of the seeding. The troughs would be equipped with escape ramps as well as floating and manual shut-off valves in order to regulate and stop the flow of water to the troughs and conserve water. The only new road needed for the pipelines would be along the north pipeline. This road would be created as a result of installing the north pipeline. This would be a two-track road and would be for pipeline maintenance purposes. The other pipelines would not need additional roads because they already have an existing road to access the pipelines and troughs. The South Butte Well and Pipelines would have a total disturbance of approximately 8 acres.

A cooperative agreement has been entered into for construction and maintenance of the well, storage tanks, pipelines and troughs. The permittee would supply and install the well and pump. In addition, the permittee would supply approximately 5.5 miles of pipeline, approximately 5 troughs and 2 storage tanks and may be contingent on receiving funding from U.S. Department of Agriculture. The Bureau of Land Management has agreed to install the pipelines, storage tanks and water troughs and would be completed in accordance with specifications and best management practices (RMP, 2008). The permittee would be responsible for the maintenance of the well, storage tanks, pipelines and troughs. The Bureau of Land Management would only be responsible for the installation of the pipelines, troughs and storage tanks.

Occasional maintenance of the pipelines may be required to repair split or broken portions of the pipeline or troughs. This would require excavating the portions of the pipeline to be repaired with heavy equipment (backhoe or similar equipment) which would then be re-buried. This would also require the use of existing two-tracks and possibly driving over a small area of vegetation at the areas along the pipeline to be repaired. These activities would require prior authorization from the Bureau’s authorized officer (see pipeline maintenance below).

Normal maintenance for the well and troughs is defined as:

1. Maintaining adequate oil level in mill motor.
2. Draining and cleaning stock trough yearly or as needed.
3. Drain System: Repair all leaks, breaks, or clogs in drain pipe.
4. Ensure proper attachment of bird ladders in stock trough.
5. Repair leaks in stock trough.
6. Repair or replace trough braces as needed
7. Replacing dirt, or gravel, or rock fill around trough, when necessary.

8. Replacing those items above ground which require replacement due to normal use.
9. Replacement of parts and/or repairing of the well and associated developments. This includes below ground maintenance.
10. All replacement parts will be equivalent to the original parts, as determined by Bureau personnel and original specifications.
11. Allow animals (wildlife, wild horses) to use the water along with authorized livestock.

Normal maintenance for the pipelines, troughs and storage tanks is defined as:

The labor and materials required annually to keep a pipeline in a condition adequate to satisfy the proper distribution and maintenance of livestock. This includes but is not limited to the following:

1. Repair of broken or split pipe that can be accomplished with hand tools.
2. Ensure proper attachment of bird ladder in stock trough.
3. Repair leaks in stock trough.
4. Repair or replace trough braces.
5. Replacing dirt, gravel or rock fill around trough(s).
6. Replacing those items above ground which will require replacement due to normal use.
7. Maintaining the improvement according to original Bureau Standards.
8. Repair requiring motorized or heavy equipment and ground disturbing activities will require prior Bureau authorization.

## **Proposed Fence**

The proposed Thirty Mile Spring and South Butte allotments boundary fence would be constructed in 2 sections that extend from the South Butte Seeding and Butte Seeding Fences (see attached map Figure 1 (p. 43)). The west section of fence would be a straight, 0.78 mile long section, running in a east/west direction starting at the southwest corner of the existing South Butte Seeding allotment boundary fence and would tie into a high rocky outcrop to the west of the South Butte Seeding. A 14 foot cattleguard would be installed across the road where the section of fence meets the South Butte Seeding fence as well as a gate that spans 20 feet adjacent to the cattleguard. The east section of the fence would tie into the existing Butte Seeding Fence allotment boundary fence and a 28 foot cattleguard (two 14' panels) would be installed across the county road with an adjacent gate that spans 20 feet. The southern end of this section of fence would tie into a high rocky outcrop and include a false corner. The false corner is designed to deter livestock from moving around the end of the fence. This section of fence would be approximately 0.54 mile in length. The total fence length for 2 section of fence is 1.32 miles. The new east section of fence would also be the new allotment boundary line between the Thirty Mile Spring and the South Butte allotments. This would include removing approximately 125 acres from the South Butte allotment and adding them to the Thirty Mile Spring allotment.

Fence construction would involve the use of pick-up trucks and/or a tractor, or other similar equipment as necessary, with a post-hole diggers/pounder attached . This would also consist of overland travel for the length of the fence. A two-track road would be created and remain visible until vegetation is naturally restored along the fence. The installation of the cattleguards would require digging a pit in the existing roadway approximately 2 feet deep and 10 feet wide by 24 feet long for the 14 foot cattleguard and 2 feet deep and 10 feet wide by 38 feet for the 28 foot cattleguard. Each cattleguard would consist of the grid panels, concrete bases, two wings and two cedar wing posts. Existing roads would be utilized to the extent possible for the construction of the fence. The fence would be a standard BLM 4-wire fence built to meet specifications regarding cattle and wildlife (BLM Manual 1737), consisting of a smooth bottom wire and three strands of barbed wire. Fence posts and stretch panels would consist of steel T-posts and steel pipe panels. Permanent markers would be attached to multiple wires between posts during construction to alert livestock and/or wildlife to the new fence (RMP 2008). Standard operating procedures (SOP) that are applicable to this project and would be followed from the programmatic district fenceline Environmental Assessment NV-040-05-027.

A cooperative agreement has been entered into for construction and maintenance of the boundary fence. The Bureau of Land Management has agreed to supply all of the fencing and cattleguard equipment (posts, wire, cattleguard panels, wings and end posts) and has agreed to install and maintain the 2 cattleguards. The permittees have agreed to install and maintain the fence. The permittee of the Thirty Mile Spring allotment would be responsible for the installation and maintenance of the east section of the fence and the permittee of the South Butte allotment would be responsible for the installation and maintenance of the west section of the fence.

Occasional maintenance of the fence would require overland travel with a pick-up truck or ATV to access the broken section of fence.

Maintenance of fences is defined as the labor and materials needed to keep an existing fence in a condition adequate to prevent livestock movement through, under, or over the fence. At this time maintenance responsibility would consist of:

1. Ensuring that all strands of fence wire between fence posts are tightly stretched and secured to the fence posts by metal clips or staples as appropriate for the type of post.
2. Ensuring that all fence posts are securely in place and that bent, broken, or missing posts and stays are replaced as needed.
3. Ensuring that all wooden stretch panels, corner braces, and gate posts are securely in place and in sound condition. Rotten or broken wood posts must be replaced as needed.
4. Ensuring that all strands of fence wire and fence spacing wires or wood poles which form the gates are properly stretched and secured. Each gate should have a suitable smooth retaining wire or latch for secure Closure of the gate.
5. Ensuring that the appropriate Bureau standards are maintained.

### Cattleguards

Normal maintenance and upkeep of cattleguards will include the following:

1. Cleaning the pit under the cattleguard to the extent required to prevent livestock movement over it and to ensure adequate drainage.
2. Any rails that are cut or damaged will be returned to original Bureau Standards.
3. Any wings that are cut or damaged will be returned to original Bureau Standards. This also includes keeping wires taut that are stretched between the wings and post.

### **2.1.1. Migratory Birds**

Fence construction and/or pipeline construction is not anticipated during the migratory bird nesting period, from April 15 to July 15. If any construction is necessary during that period, a survey of the areas to be disturbed would be completed prior to construction by a wildlife biologist to identify active nests so that they may be avoided.

### **2.1.2. Noxious and Invasive Weeds**

A Weed Risk Assessment was conducted in conjunction with this project. The stipulations listed in the Weed Risk Assessment (See Appendix C (p. 49)) would be followed during construction of the fence, well, storage tanks, pipelines, and troughs.

### **2.1.3. Monitoring**

Monitoring will be conducted in the form of compliance checks during and after construction of the project. Rangeland monitoring data would continue to be collected in accordance with the Ely District Approved Resource Management Plan (August 2008).

## **2.2. Description of Alternatives Analyzed in Detail:**

### **2.2.1. No Action Alternative**

The No Action Alternative represents the status quo. Under the no action alternative, the fence, well, storage tanks or pipelines and troughs would not be constructed. Current management strategies for the area would continue.

## **2.3. Alternatives Considered but not Analyzed in Detail**

- Water Hauling was identified as an alternative to the proposed action, but the current livestock operator has been employing this method for a number of years and has not been successful distributing livestock to the extent needed.
- Herding was also identified as an alternative to the proposed action, but the current livestock operator has been employing this method for a number of years and has not been successful in controlling livestock drift between the South Butte and Thirty Mile Spring Allotments.

## 2.4. Conformance

### Proposed action

The proposed action is in conformance with the Ely District Record of Decision and Approved Resource Management Plan (RMP) (August 20, 2008). The following are resource goals and/or objectives that apply:

**Livestock Grazing:** “Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health..” (pg. 85).

#### **Water Resources:**

WR-4: Maintain or improve watershed conditions by controlling or restricting land uses and utilizing tools, where appropriate, to promote desired vegetation conditions.

**Soil Resources:** “Maintain or improve long-term soil quality”. “To ensure that soils throughout the planning area exhibit infiltration and permeability appropriate to the soil type, with erosion and compaction having minimal effect on soil quality” (pg. 23).

SR-1: Restore and maintain desired range of conditions to increase infiltration, conserve soil moisture, promote groundwater recharge, and ground cover composition (including litter and biotic crusts) to increase or maintain surface soil stability and nutrient cycling.

**Vegetative Resources:** “To manage for resistant and resilient ecological conditions including healthy, productive, and diverse populations of native or desirable nonnative plant species appropriate to the site characteristics” (pg.26).

**Fish and Wildlife:** “Provide habitat for wildlife (i.e., forage, water, cover, and space) and fisheries that is of sufficient quality and quantity to support productive and diverse wildlife and fish populations, in a manner consistent with the principles of multi-use management, and to sustain the ecological, economic, and social values necessary for all species” (pg. 34).

**Special Status Species:** “To manage suitable habitat for special status species in a manner that will benefit these species directly or indirectly and minimize loss of individuals or habitat from permitted activities” (pg. 38).

**Watershed:** “To manage watersheds that display physical and biological conditions or functions required for necessary ecological components to achieve state water quality criteria, maintain ecological processes, and sustain appropriate uses” (pg. 105).

### No Action Alternative

The no action alternative is also in conformance with the Ely District Record of Decision and Approved Resource Management Plan (RMP) (August 20, 2008). The current management plans for the area are designed to achieve the Ely District management goals.

### **2.4.1. Relationship to Statutes, Regulations, or other Plans:**

The proposed action is in compliance with the following laws, regulations, Executive Orders, county public land plans, and other plans:

- Northeastern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (1997).
- The White Pine County Public Lands Policy Plan (2007)
- The White Pine County Elk Management Plan (Elk Management Review Team 2007).
- The National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347, January 1, 1970, as amended 1975 and 1994)
- The Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701-1782, October 21, 1976, as amended 1978, 1984, 1986, 1988, 1990-1992, 1994 and 1996)
- State Protocol Agreement between the Bureau of Land Management (BLM), Nevada and the Nevada State Historic Preservation Office (October 26, 2009)
- National Historic Preservation Act (Public Law 89-665; 16 U.S.C. 470 as amended through 2000)
- Migratory Bird Treaty Act (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989)
- The Endangered Species Act of 1973 (16 U.S.C. §§ 1531-1544, December 28, 1973, as amended 1976-1982, 1984, and 1988)
- Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds (2001)

### **2.4.2. Tiering**

This document is tiered to the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (RMP/EIS) released in November 2007.

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## **Chapter 3. Affected Environment:**

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### 3.1. Project Area Description

The project area is defined as a small portion of the Thirty Mile Spring allotment and the South Butte and South Butte Seeding allotments.

The Thirty Mile Spring Allotment encompasses approximately 178,716 public land acres. The grazing allotment occurs within White Pine County, and is situated approximately 20 miles northwest of Ely, Nevada (Figure 1 (p. 43)). Part of the Thirty Mile Spring Allotment is within the Triple B Wild Horse Herd Management Area. There is one permittee (Table 1) with permitted use on the Thirty Mile Spring Allotment.

**Table 1. Permitted grazing use on the Thirty Mile Spring Allotment in White Pine County, Nevada.**

Operator Number	Allotment Name	Period of Use	Livestock Kind	AUMs
2704534	Thirty Mile Spring	4/15 to 2/28	Cattle	3419
2704534	Thirty Mile Spring	4/15 to 2/28	Sheep	4924

The South Butte Allotment encompasses approximately 26,081 public land acres. The grazing allotment occurs entirely within White Pine County, and is situated approximately 35 miles northwest of Ely, Nevada (Figure 1). Part of the allotment is within the Triple B Wild Horse Herd Management Area. There is one permittee (Table 2) with permitted use on the South Butte Allotment.

**Table 2. Permitted grazing use on the South Butte Allotment in White Pine County, NV.**

Operator Number	Allotment Name	Period of Use	Livestock Kind	AUMs
2704544	South Butte	4/15 to 2/28	Cattle	389

The South Butte Seeding Allotment encompasses approximately 968 public land acres. The grazing allotment occurs entirely within White Pine County, and is situated approximately 37 miles northwest of Ely, Nevada (Figure 1). There is one permittee (Table 3) with permitted use on the South Butte Seeding Allotment.

**Table 3. Permitted grazing use on the South Butte Seeding Allotment in White Pine County, NV.**

Operator Number	Allotment Name	Period of Use	Livestock Kind	AUMs
2704544	South Butte Seeding	5/1 to 10/31	Cattle	242

### 3.2. Resources/Concerns Considered for Analysis

The following items have been evaluated for the potential for significant impacts to occur, either directly, indirectly, or cumulatively, due to implementation of the proposed action. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general and to the Ely BLM in particular.

<b>Resource/Concern Considered</b>	<b>Issue(s) Analyzed</b>	<b>Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis</b>
Air Quality	No	White Pine County, Nevada is designated as attaining Air Quality standards for lead and attainment/unclassifiable for the other six criteria pollutants monitored in Nevada (sulphur dioxide, carbon monoxide, ozone, particulate matter <2.5 micrometers, particulate matter <10 micrometers, and nitrogen dioxide). The Proposed Action and No Action Alternative would not affect the designation of air quality standards in White Pine County. Detailed analysis is not necessary.
Areas of Critical Environmental Concern (ACEC)	No	No ACEC's occur within or adjacent to project area.
Cultural Resources	No	A Class III cultural resource inventory occurred for the proposed project (reports 8111 NV-04-12-1973 and 8111 NV-04-12-1974). One feature was located within the pipeline APE but will be avoided as it outside the actual proposed disturbance.
Environmental Justice	No	No minority or low-income groups would be disproportionately affected by health or environmental effects. Concern is not present.
Fish and Wildlife	No	General habitat could be maintained or improved by the proposed action or alternatives. Design features of the proposed action including attaching markers to the wires between posts during construction to alert wildlife to the new fence will help to reduce impacts. Crucial deer winter habitat is present, also elk and some pronghorn. Construction will not take place during the period November 1 through March 31. Some wildlife may be displaced during construction. Small mammals or reptiles may be killed if they are underground or too slow to get out of the way. This will have no overall effects on populations.
Floodplains	No	Resource not present.
Forest Health	No	Resource is not present within project area.
Lands and Realty	No	There are no conflicting Right-of-Ways within project area.
Migratory Birds	No	Fence construction and/or pipeline construction is not anticipated during the migratory bird nesting period, from April 15 to July 15. If either construction is necessary during that period, a survey of the areas to be disturbed would be completed prior to construction by a wildlife biologist in order to identify active nests so that they may be avoided. A list of bird species that may be present in the area is included in Appendix B.
Mineral Resources	No	No mineral operations occur within the project area.
Native American Religious Concerns and other concerns	No	No traditional religious or cultural sites have been identified within or adjacent to the proposed project area.
Noxious and Invasive Weed Management	No	Hoary cress is adjacent to the fencing portion of the project. The design features (weed stipulations) of the proposed action would help minimize the spread of weeds. No further analysis is necessary.
Paleontological Resources	No	Currently there are no identified resources within this allotment.
Prime and Unique Farmlands	No	Approximately 571 acres of potential Prime Farmland occurs in the northeastern portion of the South Butte Allotment. This soil, if irrigated, would be considered a Prime Farmland. The Alternatives would not alter the unique physical or chemical characteristics and thus the nature of the Heist soil association or its potential to become Prime Farmland. No detailed analysis is necessary.
Rangeland Health	Yes	The proposed action and alternatives are intended to improve rangeland health of the project area, a detailed analysis is provided in chapters 3, 4 of this document.
Recreation Uses	No	Design features of the proposed action, including two cattle guards, would result in no effects on recreational uses.

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Special Status Animal Species, other than those listed or proposed by the FWS as Threatened or Endangered	Yes	Special status bird species such as the golden eagle ( <i>Aquila chrysaetos</i> ), ferruginous hawk ( <i>Buteo regalis</i> ), and loggerhead shrike ( <i>Lanius ludovicianus</i> ) may be present within or near the project area. Adherence to the minimization measure in the Migratory Bird section of the proposed action, would avoid impacts to most Special Status avian species.  Due to the ground disturbing activity described in the proposed action, impacts to sage grouse and pygmy rabbits are analyzed in the EA.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or Endangered	No	Resource not known to be present.
Soil Resources	Yes	Direct impacts to soils during construction and indirect impacts due to changes in livestock use are expected. Analyzed in EA.
Threatened or Endangered Species or critical habitat.	No	There are no Threatened or Endanger species listed or proposed for listing known to occur within the project area.
Vegetative Resources	Yes	Direct impacts to vegetation during construction and indirect impacts due to changes in livestock use are expected. Analyzed in EA.
Visual Resource Management (VRM)	No	The proposed action is consistent with the VRM classification IV and III for the area therefore no direct or cumulative impacts to visual resources would occur.
Wastes, Hazardous or Solid	No	The proposed action or alternatives would not produce hazardous or solid waste.
Water Resources	No	The proposed action is not expected to lead to a measurable change in the surface and subsurface water sources, water rights, and quantity of water that occurs in the analysis area. The appropriation of water is the responsibility of the Nevada State Water Engineer.
Wilderness	No	No Wilderness occurs within or adjacent to the project area. No further analysis is necessary.
Lands with Wilderness Characteristics	No	Lands with Wilderness Characteristics are not present within or adjacent to the project area.
Wetlands/Riparian Zones	No	No riparian areas and/or wetland zones are present in the proposed project area.
Wild Horses	No	The project area is within the Triple B Herd Management Area (HMA). Wild horses should not be affected by the proposed action.
Wild and Scenic Rivers	No	No Wild and Scenic Rivers occur within or adjacent to the project area.

### 3.3. Affected Environment

#### 3.3.1. Special Status Species

##### Sage Grouse

The greater sage-grouse (*Centrocercus urophasianus*) is a high-profile Sensitive Species that has been determined to be warranted for listing but which is precluded by other species of higher priority (Fish and Wildlife Service, 2010). It has been identified as an “umbrella” species by the Ely District BLM, and chosen to represent the habitat needs of the sagebrush (*Artemisia* spp.) obligate or sagebrush/woodland dependent guild (BLM- Ely RMP/FEIS, 2007; p. 4.7-10). The project area does occur within nesting, brood rearing and winter sage grouse habitat and is within

the 75% population areas (core breeding habitat). Two active leks, 2 inactive leks and 1 lek in which the activity status is currently unknown are within three miles of the project.

### Pygmy Rabbit

The pygmy rabbit (*Brachylagus idahoensis*) is a sagebrush obligate species which has similar habitat needs as sage grouse. The pygmy rabbit is currently designated as a Federal species of concern but has not been warranted for listing as endangered or threatened under the Endangered Species Act of 1973, as amended (Fish and Wildlife Service, 2010). The pygmy rabbit prefers areas of tall, dense sagebrush growing in deep soils which are friable and suitable for digging burrows and is often found along washes or drainages where soils are deep and sagebrush is tall (Fish and Wildlife Service, 2010). Potential habitat has been identified within the project area. Pygmy rabbits were surveyed within their historic range in Nevada between 2003 and 2006 (Larrucea and Brussard, 2008). Larrucea and Brussard (2008) found current populations of pygmy rabbits throughout all of the species' historic range in Nevada, including one near the proposed project site. The majority of the project area is in gravelly, friable soil with some areas of thick, taller brush and does not appear to be within preferred pygmy rabbit habitat. The east fence portion of the project does occur in preferred habitat for the rabbit.

## 3.3.2. Rangeland Health

The following is a summary of the Standards Determination Document by allotment completed in 2009 (Thirty Mile Spring) and 2011 (South Butte and South Butte Seeding) for achievement of the standards.

### Summary of Standards Achievement Statements by Allotment

#### Northeastern Great Basin Resource Advisory Council Standards

Allotment	Standard 1: Upland Sites	Standard 2: Riparian and Wetland Sites	Standard 3: Habitat
Thirty Mile Spring	Achieving the Standard.	Not achieving the Standard, but making significant progress towards. Livestock are a significant contributing factor. Failure to meet the standard is also related to other issues or conditions.	Not achieving the Standard, but making significant progress towards. Livestock are not a significant contributing factor. Failure to meet the standard is related to other issues or conditions.
South Butte Seeding	Achieving the Standard.	Not Applicable.	Achieving the Standard.
South Butte	Achieving the Standard.	Achieving the Standard.	Not Achieving the Standard, but making significant progress towards. Livestock are not a contributing factor to not achieving the standard. Failure to meet the standard is related to other issues or conditions

The South Butte allotment encompasses approximately 26,081 acres of mainly sagebrush dominated rangeland and the South Butte Seeding allotment encompasses approximately 968 acres of sagebrush and grass dominated rangeland. Currently, livestock distribution throughout the South Butte and South Butte Seeding allotments is very poor. Livestock generally only use the south portion of the South Butte Seeding allotment because there is only one water source available within this allotment and it is located in the south corner of the allotment (Figure

2 (p. 44)). This water source is fed by a spring and generally only flows from early spring to early-mid summer, depending on the amount of precipitation. This is causing damage to the herbaceous component (grasses and forbs) of vegetation on the South Butte Seeding allotment due to constant and repeated use of the grasses and forbs during the critical growing season. Constant and repeated use of a particular species or group of species within the same growing season reduces the vegetative cover and vigor of those species which, in turn, reduces wildlife habitat (cover, structure and forage), increases open resource sites for invasive plant species to become established and leaves soils vulnerable to increased erosion. In addition, soil compaction appears to be occurring in the south portions of the allotment due to the lack of distribution. This also results in poor water infiltration capacity and increased erosion potential. The north portion of the South Butte Seeding allotment is not grazed very often and exhibits good vegetative vigor and cover and healthy soils.

Livestock distribution on the South Butte allotment is generally on the east and southeast bench portion of the allotment. There are several springs in this area, many of which are on private lands. There are 3 springs within the South Butte allotment that are under BLM jurisdiction. All 3 springs were assessed in 2010 and were found to be functioning properly but all had the risk factors of livestock and wildlife trampling, areas of bare soil and wallows. There was also a wildfire in 1986 which burned approximately 621 acres and now provides abundant herbaceous forage on the east portion of the South Butte allotment and draws the cattle to this area of the allotment in addition to the water sources.

Livestock use on the South Butte Seeding allotment is generally every spring towards the end of the critical growing season to summer (May to July). Livestock use on the South Butte allotment is generally from May to October or November and is generally in the same areas all year. Research has shown that repeated spring use is detrimental to grass and forb production and allows for the increase in shrubs and the more undesirable plants (McGinty et al., 2009; Milchunas, 2006). These seasons of use on both allotments are mainly due to the lack of adequate, reliable year-round water sources throughout both of the allotments.

Livestock currently drift between the Thirty Mile Spring and the South Butte allotments and use forage from these allotments. This can lead to repeated use or over utilization of forage in the areas in which the drifting occurs. In addition, this has led to many disputes between neighboring allotment livestock permittees in the past.

### **3.3.3. Vegetative Resources**

The project area is sagebrush dominated rangeland, with grasses and forbs as well as Pinyon Pine and Juniper trees. There is also a crested wheatgrass seeding within the project area.

### **3.3.4. Soil Resources**

The soils with the project area are mainly a gravelly-sandy loam.

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# **Chapter 4. Environmental Effects:**

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## 4.1. Direct and Indirect Effects

### 4.1.1. Special Status Species

#### Proposed Action

##### Sage Grouse

The troughs may provide a new source of free water for sage grouse during parts of the year, when livestock are present. The intent of the project, well, pipelines and troughs is to allow for better distribution of livestock within the allotments. Provided that the overall use of the areas leaves sufficient residual vegetation for the life cycle of the sage grouse, this may be of benefit to the species. The proposed fences could pose a risk of mortality by collision with the fence (Fish and Wildlife Service, 2010). The fence wire would be marked with multiple permanent markers, which has been shown to reduce collisions by up to 60% by alerting the birds to the presence of the fence (Wyoming Game and Fish Department, 2009). Fences have also been known to provide a perch for raptors, which also can poses a risk of predation (Fish and Wildlife Service, 2010). The fence would be constructed with steel T-posts and steel pipe stretch panels which may reduce the risk of providing perches for raptors due to the size and shape of the posts and pipe. The West Nile Virus can affect sage grouse and other birds. Although West Nile Virus has been identified to occur in White Pine County, no confirmed cases of the virus infecting humans or animals have been identified at the present time. Mosquitoes, which are the vector for the virus, breed in standing water. The water troughs in the project area would receive frequent use from livestock and wildlife. This use agitates the water surface and may kill many of the mosquito larvae. Completion of the project during the late summer/early fall period would reduce other disturbance impacts.

##### Pygmy Rabbit

Although no pygmy rabbits are known to occupy the project area, construction activities of the pipeline and the fence may disturb individual rabbits or destroy individual burrows that may be present. These risks would be avoided by surveying the areas to be disturbed prior to construction. In addition, fences have also been known to provide a perch for raptors, which also can poses a risk of predation (Fish and Wildlife Service, 2010). As stated earlier, the fence would be constructed with steel T-posts which may reduce the risk of providing perches for raptors. The new watering sites would result in livestock concentration areas and create open areas (see Vegetative Resources) and introduce or increase grazing activities around these sites. Although the project would result in the removal or crushing of sagebrush vegetation and rip and replace soil, the overall footprint of the action (approx. 8 acres) is very small compared to the amount of habitat for the pygmy rabbit that currently exists in and around the project area (approx. 21, 475 acres). In addition, it is not anticipated that these activities would affect the pygmy rabbit population(s) in or around the project. The Fish and Wildlife Service has concluded that developments such as those described in this project (fences, wells and pipelines) are not a threat to pygmy rabbit (Fish and Wildlife Service, 2010). Completion of the project during the late summer/early fall period would reduce other disturbance impacts.

#### No Action Alternative

Should the project not be implemented there would be no new sources of water for wildlife, and some areas which receive heavier use than others would continue to do so, while other areas would continue to receive less pressure. There would be no new fences to pose a danger to sage grouse or pygmy rabbits and the well and pipeline construction would not occur.

## 4.1.2. Rangeland Health

### Proposed Action

#### Well and Pipeline

The construction activities of the well with its associated pipelines, storage tanks and troughs would crush and remove vegetation and disturb some of the soil on approximately 8 acres of sagebrush vegetation and soils within the total area of approximate 27,049 acres of sagebrush rangeland that are within the South Butte and South Butte Seeding grazing allotments. These activities would likely not inhibit the achievement or progression towards the rangeland health standards. The relatively small amount of vegetation and soil that would be removed or trenched (approx. ½ acre) would likely stabilize and recover and is anticipated to maintain the overall site stability due to the small amounts and localized disturbance to the soil and the vegetation. In addition, it is anticipated that adequate vegetation, both standing and litter, would remain on or immediately adjacent to the sites to assist in stabilizing the disturbed areas.

Beneficial effects to rangeland health from the action on both the South Butte and South Butte Seeding allotments include increasing distribution and more uniform use throughout both of the allotments and decreasing constant and repeated or over use of herbaceous vegetation, riparian areas or water sources in particular areas of the allotments. Livestock are often reluctant to travel long distances (1-2 miles, depending on terrain) to water. Development of new water sources in areas that are further than 1 km from existing water sources usually increases forage use nearby and improves the overall uniformity of grazing (Bailey, 2004). Additional water sources would also increase the flexibility of the seasons of use and pattern of use on the South Butte and South Butte Seeding allotments by providing more reliable year-round sources of water which are spread out throughout the allotments. This could likely lead to alternating the use or areas of use on both the South Butte and South Butte Seeding allotments which would likely improve the overall vegetative and soil resource health within both the South Butte and South Butte Seeding allotments.

The proposed action would not directly affect riparian areas within the South Butte Allotment but some indirect benefits would likely occur. Research has shown that riparian areas can benefit from off-site water sources. Water developments have been useful for protecting riparian areas. Porath et al. (2002) found that providing an off-stream water source decreased grazing pressure in the riparian zone, especially early in the grazing season when forage was plentiful (Bailey, 2004). In another study conducted in the fall, Miner et al. (1992) observed that cows spent significantly less time in riparian areas when off-site water sources were available (Bailey, 2004).

#### Boundary Fence

The drift fence between the Thirty Mile Spring and South Butte allotments would improve livestock management by preventing drift between the two allotments. Restricting livestock movement between these allotments would help prevent over use or repeated use of forage in the areas in which the drifting occurs. It is anticipated that the construction activities of installing the

2 sections of fence would result in disturbing (crush vegetation) approximately 1 acre or less of sagebrush vegetation mixed with Pinyon Pine and Juniper trees. This disturbance would likely recover and would not result in areas of excessive erosion because vegetation would remain on the areas of disturbance. These activities would likely not inhibit the achievement or progression towards the rangeland health standards.

Overall the proposed action would likely improve livestock distribution, use flexibility and livestock management which is anticipated to improve soil, riparian and vegetative/habitat conditions throughout the South Butte, South Butte Seeding allotments and a small portion of the Thirty Mile Spring allotments and assist in progressing towards or achieving the rangeland health standards and guidelines.

### **No Action Alternative**

With the No Action Alternative, the current conditions would likely continue to occur (see Affected Environment section above). This action would continue to limit distribution and flexibility of use on the South Butte and South Butte Seeding allotments. Livestock would also likely continue to drift between the South Butte and Thirty Mile Spring allotments. Although the current management plans for these grazing allotments have been designed to continue to progress towards the achievement or achieve the rangeland health standards and maintain healthy and productive rangelands and wildlife habitat, this action does not employ the available tools or provide the opportunities that the proposed action does to improve soil, riparian and vegetative conditions throughout the South Butte, South Butte Seeding and a small portion of the Thirty Mile Spring as the proposed action.

## **4.1.3. Vegetative Resources**

### **Proposed Action**

Direct impacts from the proposed action would include the crushing and removal of vegetation of approximately 8 acres of sagebrush vegetation of the 27,049 acres of sagebrush rangeland during construction. Desert vegetation can take many years to recover, with grasses reestablishing first, followed by forbs and shrubs. Recovery of vegetation is primarily dependent on precipitation following construction. Indirect impacts would include increased grazing and trampling near the new water sources. This impact would be based on how the use of the water sources is rotated, and could be increased or decreased based on rotation. Also, cattle often trail along fence lines, thus trampling vegetation. These trails are approximately one foot wide, and are expected to impact less than 1 acre. Other impacts based on the reduced grazing use at other water sources is covered in Rangeland Health.

### **No Action Alternative**

With the No Action Alternative, vegetation would not be disturbed by construction. Also, livestock would not move into the portions of the allotment at a higher density grazing and trampling vegetation. Other impacts are described in Rangeland Health.

## 4.1.4. Soil Resources

### Proposed Action

Direct effects would include the compaction of soils from equipment travel in areas outside of existing roads and soil displacement from excavation activities associated from pipeline burial. Proposed trough locations would be sited in areas previously disturbed and compacted and as such would not contribute to additional effects. The effects of soil compaction from the equipment would be temporary and may be reduced by conducting the off-road travel on dry soils. The displacement of soil and the resultant mixing of soil physical characteristics would not be expected to lead to a loss of soil productivity due to the relatively shallowness of the pipeline trenches and the small degree of overall soil disturbance.

Indirect effects to soil would include the short-term effect of an increased susceptibility to wind erosion due to the removal of vegetation along proposed pipeline course. The effect would be expected to last for about one season until such time that either vegetation is reestablished or until the finest soil particles are winnowed away. The width of the proposed pipeline and extent of potential vegetative resource disturbance greatly reduce the possibility of any increased risk to wind erosion being any more than a minor possibility.

### No Action Alternative

No new ground disturbing activity would occur. Current conditions would continue.

## 4.2. Cumulative Effects

### 4.2.1. Introduction

As required under NEPA and the regulations implementing NEPA, this section analyzes potential cumulative impacts from past, present, and reasonably foreseeable future actions combined with the Proposed Action within the area analyzed for impacts in Chapter 3 specific to the resources for which cumulative impacts may be anticipated. A cumulative impact is defined as “the impact which results from the incremental impact of the action, decision, or project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 Code of Federal Regulations 1508.7).

The Cumulative Effects Study Area (CESA) is defined as the Thirty Mile Spring, South Butte and South Butte Seeding allotments.

### 4.2.2. Past, Present and Reasonably Foreseeable Future Actions

#### Past Actions

Livestock and wild horse grazing has a long history in the region dating back to the late 1800's. Throughout its history, livestock grazing has been characterized by localized areas of intense use.

In many areas in which this intense grazing occurred there is a lack of herbaceous cover and they are primarily shrub dominate. Hunting, trapping, wildlife viewing, and other recreational activities have occurred within the project area for many years. OHV use has occurred on the roads and two-tracks within the area. Three wildfires have occurred within the CESA during the 1980's; two fires were approximately 650 acres, and the third was approximately 85 acres. One of the larger fires recovered with a mix of perennial grasses, shrubs and invasive cheatgrass while perennial grass and shrub species dominate the other wildfire areas. Range improvement projects have occurred in the area to improve grazing management and include fencing and spring/stock water developments.

## **Present Actions**

The project area is currently being grazed by livestock and wild horses. Current livestock grazing management can be characterized as light to moderate use of the available forage. Hunting, trapping, wildlife viewing, and other recreational activities occur within the project area occasionally throughout the year. This includes the use of the several existing two-track and developed roads in the area as well as cross-country hiking. OHV use currently occurs on the roads and two-tracks within the project area. Maintenance of range improvements is ongoing and generally includes repairing fences and stock water toughs. These maintenance activities generally require the use of existing two-track and developed roads.

## **Reasonably Foreseeable Future Actions**

A habitat improvement and fuels reduction project is planned to begin within the next year in the southern portion of the CESA. As proposed, the project would allow thinning of pinyon and juniper trees across 1,800 to 4,400 acres, mostly within the vicinity of some spring sources and sagebrush habitat. The project could also treat rabbitbrush within one ephemeral drainage (Combs Creek). It is anticipated that hunting, trapping, wildlife viewing, and other recreational activities would continue to occur within the project area year round. OHV use is likely to occur on the roads and two-tracks within the project area. Maintenance of range improvements would likely continue. New range improvement projects are considered on an annual basis and analyzed on a site-specific basis. It is anticipated that livestock and wild horse grazing would likely continue at current levels. The Silver State OHV Trail has been proposed to be designated adjacent to the project. Travel on this designated trail would be limited to existing roads. The SWIP transmission line has been planned to cross through the project area immediately adjacent to both the proposed well and pipelines as well as the proposed fence.

## **4.3. Cumulative Effects Analysis**

### **4.3.1. Special Status Species**

#### **Proposed Action**

The project, in combination with other actions, would possibly have a slight benefit to sage grouse if it relieves grazing pressure in some areas and allows more uniform grazing patterns throughout the allotments. Impacts from the fences may be avoided by affixing permanent markers. The long term effects from the construction activities of the fence and pipelines are anticipated to recover at normal rates and continue to provide suitable habitat for sage grouse and pygmy rabbit. The effect

from maintenance activities, as described in future actions, is not anticipated to affect sage grouse or pygmy rabbits and would be surveyed prior to the maintenance activities occurring.

### **No Action Alternative**

The no action alternative, in combination with the other actions, would likely continue the current status in the area. The fuels reduction project would still likely proceed as proposed.

## **4.3.2. Rangeland Health**

### **Proposed Action**

It is anticipated that the proposed action, in combination with the past, present and reasonably foreseeable future actions, would continue to achieve or progress towards achieving the rangeland health standards and guidelines within the CESA and could provide for the desired habitat and rangeland health conditions over the long term.

The proposed action would improve livestock management and increase distribution and more uniform use throughout the South Butte, South Butte Seeding and a small portion of the Thirty Mile Spring allotments and decreasing constant and/or repeated use of herbaceous vegetation and riparian areas in particular areas of the allotments. In addition, it would also increase the flexibility of the use on both allotments. The fuels reduction project would likely increase the amount of herbaceous vegetation in the areas that would be treated on the Thirty Mile Spring and South Butte allotments and create more desirable habitat for wildlife and would assist in the achievement of the rangeland health standards. The proposed action would assist in the control of livestock movement to the treated areas, as well as other portions of the allotments from the adjacent grazing allotment and possibly draw livestock away from the treated areas on the South Butte allotment and help prevent constant or repeated use and over utilization of herbaceous vegetation on the allotments and treated areas. The impacts from maintenance activities would be negligible compared to the overall area of the CESA and the overall functionality of the well, pipelines and fence to maintain livestock control and adequate, reliable water sources for the overall achievement of the rangeland health standards.

### **No Action Alternative**

It is anticipated that the no action alternative in combination with the past, present and reasonably foreseeable future actions, would not affect rangeland health. The current conditions would continue to occur. Current livestock management plans are designed to continue to achieve or progress towards achieving the rangeland health standards with the current conditions. It can be assumed that the no action alternative would also continue to achieve or progress towards achieving the rangeland health standards. Although, this action would continue to limit distribution and flexibility of use on the South Butte and South Butte Seeding allotments. Livestock would also likely continue to drift between the South Butte and Thirty Mile Spring allotments.

## **4.3.3. Vegetative Resources**

### **Proposed Action**

The proposed action would distribute livestock use in the CESA, thus reducing impacts to vegetation in the South Butte Allotment as a whole. This reduction in stress to plants would increase plant resilience, so that vegetation recovers following various disturbances as described in the past, present and reasonably foreseeable future actions.

### **No Action Alternative**

It is anticipated that the no action alternative in combination with the past, present and reasonably foreseeable future actions, the current conditions would continue to occur. Higher intensity grazing in other portions of the allotment would reduce plant vigor, thus making these areas more susceptible to weed infestations when other disturbances occur.

### **4.3.4. Soil Resources**

#### **Proposed Action**

The potential amount of soil disturbed by the Proposed Action in the analysis area is less than 0.05% of the total area. Erosion effects associated with the Proposed Action would not be discernible from past, present, or future actions or from the natural range of variability associated with the landscape, topography, or prevalent climatic variability.

#### **No Action Alternative**

No difference would be discernible from the cumulative effects analysis for the Proposed Action and the No Action Alternative.

### **4.4. Mitigation and Residual Effects**

A ground level wildlife drinker would be installed along the north pipeline to benefit sage grouse, as well as a small fence to exclude livestock from the drinker, to mitigate the effects of distributing livestock use around the north water site.

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## **Chapter 5. Tribes, Individuals, Organizations, or Agencies Consulted:**

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## **5.1. Summary of the Tribes, Individuals, Organizations, or Agencies Consulted**

- Tribal Coordination Letters were sent June 15, 2011. No concerns were identified.
- On June 2, 2011 letters were sent to interested persons and organizations informing them of this proposed action and to solicit concerns/comments. Comments were from Western Watershed Project and were considered in the authoring of this EA.
- A summary of the project proposal was posted on the eGov for Planning and NEPA (ePlanning Front Office) website on February 1, 2011. No public comments were received.
- The Nevada Department of Wildlife as well as the local University of Nevada Cooperative Extension were consulted on the risk or probability of affecting sage grouse with the West Nile Virus associated with the proposed action.

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# **Chapter 6. List of Preparers**

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**Table 6.1. List of Preparers**

<b>Name</b>	<b>Title</b>	<b>Responsible for the Following Section(s) of this Document</b>
TJ Mabey	Natural Resource Specialist	Project Lead/Rangeland Health
Mindy Seal	Natural Resource Specialist/Planning and Environmental Coordinator	Vegetative Resources/Noxious and Invasive, Non-native Species
Marian Lichtler	Wildlife Biologist	Wildlife, Special Status Species, Migratory Birds
Erin Rajala	Outdoor Recreation Planner	Recreation, Visual Resources
Lisa Gilbert	Archeologist Technician	Cultural Resources, Paleontological Resources
Mark D'Aversa	Hydrologist/Soil Scientist	Air, Soil, Water, Wetlands and Riparian, Floodplains
Elvis Wall	Native American Coordinator	Native American Cultural Concerns
Cody Coombs	Fuels Specialist	Reviewer
Melanie Peterson	Environmental Protection Specialist	Hazardous Materials, Safety
Miles Kriedler	Geologist	Mineral Resources
Stephanie Trujillo	Realty Specialist	Lands, Realty

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# Chapter 7. References

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# Bibliography

- Bailey, D. W. 2004. Management strategies for optimal grazing distribution and use of arid rangelands. *Journal of Animal Science*, 82: 147-153..
- Floyd T, Elphick CS, Chisholm G, Mack K, Elston RG, Ammon EM, and Boone JD. 2007. *Atlas of the Breeding Birds of Nevada*. Reno: University of Nevada Press..
- Larrucea, Eveline S., Peter F. Brussard. 2008. Habitat selection and current distribution of the Pygmy Rabbit in Nevada and California, USA. *Journal of Mammalogy*, 89 (3): 691–699..
- McGinty, Ellie Leydsman, Ben Baldwin, Roger Banner. 2009. A Review of Livestock Grazing and Range Management in Utah. [http://extension.usu.edu/utahrangelands/files/uploads/Literature\\_Review.pdf](http://extension.usu.edu/utahrangelands/files/uploads/Literature_Review.pdf)..
- Milchunas, Daniel G. 2006. Responses of plant communities to grazing in the southwestern United States. Gen. Tech. Rep. RMRS-GTR-169. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 126 p..
- USDOI, Bureau of Land Management. 2007. Ely Proposed Resource Management Plan/ Final Environmental Impact Statement. U.S. Department of the Interior, Bureau of Land Management. BLM/EL/PL-07/09+1793. DOI No. FES07-40. November 2007..
- USDOI, Bureau of Land Management. 2008. Ely District Record of Decision and Approved Resource Management Plan. U.S. Department of the Interior, Bureau of Land Management. BLM/NV/EL/PL-GI08/25+1793..
- USDOI, Bureau of Land Management. 2008. National Environmental Policy Act. Handbook H-1790-1..
- USDOI, Bureau of Land Management. 1997. Standards and Guidelines for Nevada's North-Eastern Great Basin Area..
- USDOI, Bureau of Land Management. 1994. Guidelines for assessing and documenting cumulative impacts. WO-IB-94-310..
- USDOI, Fish and Wildlife Service. 2010. Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List the Sage Grouse as Threatened or Endangered; Proposed Rule. *Federal Register* / Vol. 75, No. 55 / Tuesday, March 23, 2010..
- USDOI, Fish and Wildlife Service. 2010. Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List the Pygmy Rabbit as Endangered or Threatened; Proposed Rule. *Federal Register* / Vol. 75, No. 189 / Thursday, September 30, 2010..
- Wyoming Game and Fish Department. 2009. Fence marking to reduce greater sage-grouse (*Centrocercus urophasianus*) collisions and mortality near Farson, Wyoming—Summary of interim results October 26, 2009. Wyoming Game and Fish Department. pp. 3. .

## **Acronyms**

**BLM**-Bureau of Land Management

**CFR**-Code of Federal Regulations

**DR**-Decision Record

**EA**-Environmental Assessment

**EIS**-Environmental Impact Statement

**FLPMA**-Federal Land Policy and Management Act

**FMUD**-Final Multiple Use Decision

**FONSI**-Finding of No Significant Impact

**ID**-Interdisciplinary

**IM**-Instructional Memorandum

**NEPA**-National Environmental Policy Act

**NRCS**-Natural Resource Conservation Service

**RFFA**-Reasonably Foreseeable Future Action

**RMP**-Resource Management Plan

**USDA**-United States Department of Agriculture

**USDO I**-United States Department of the Interior

# Appendix A. Maps



Figure 1. Project Layout Map

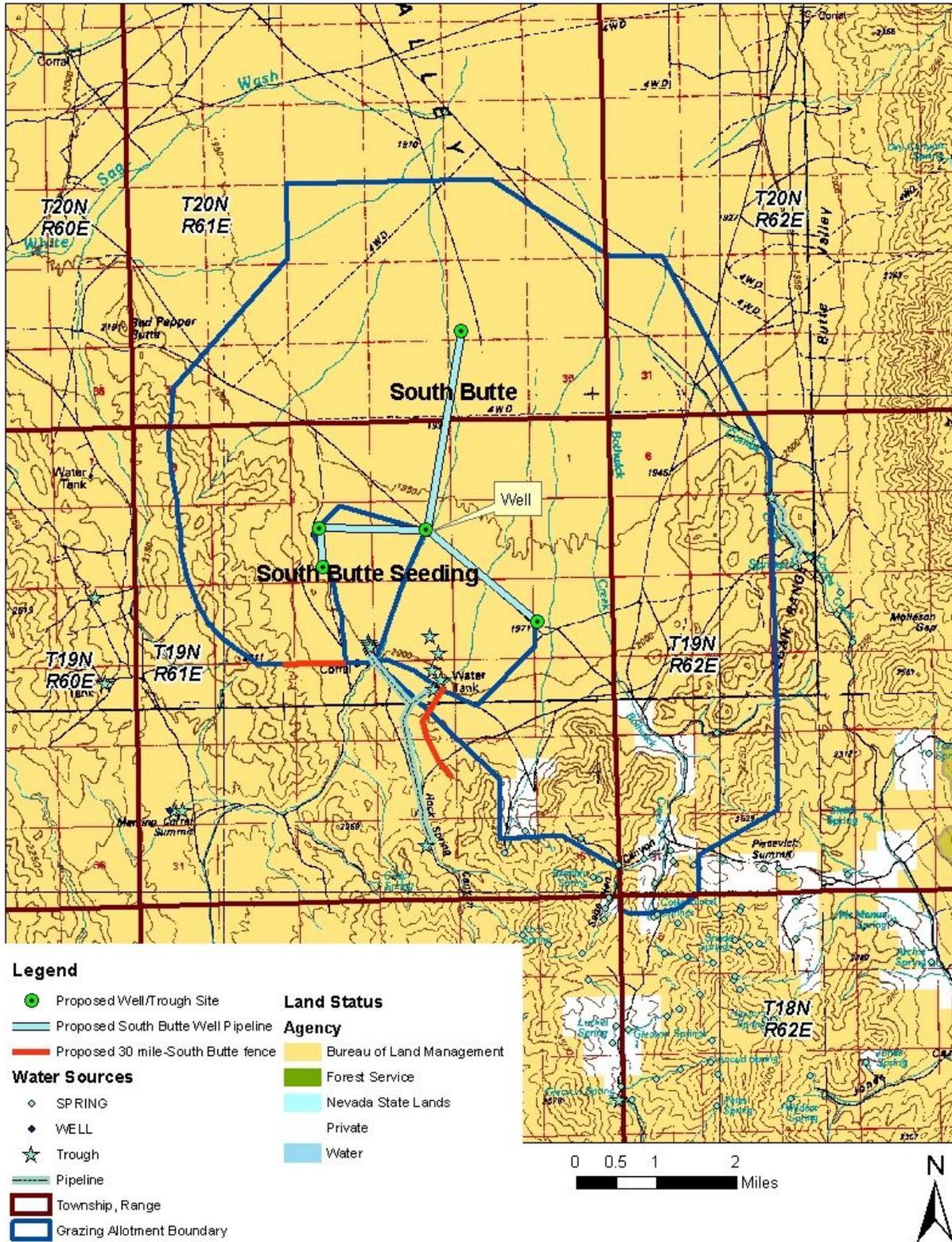


Figure 2. Proposed Project and Existing Water Sources

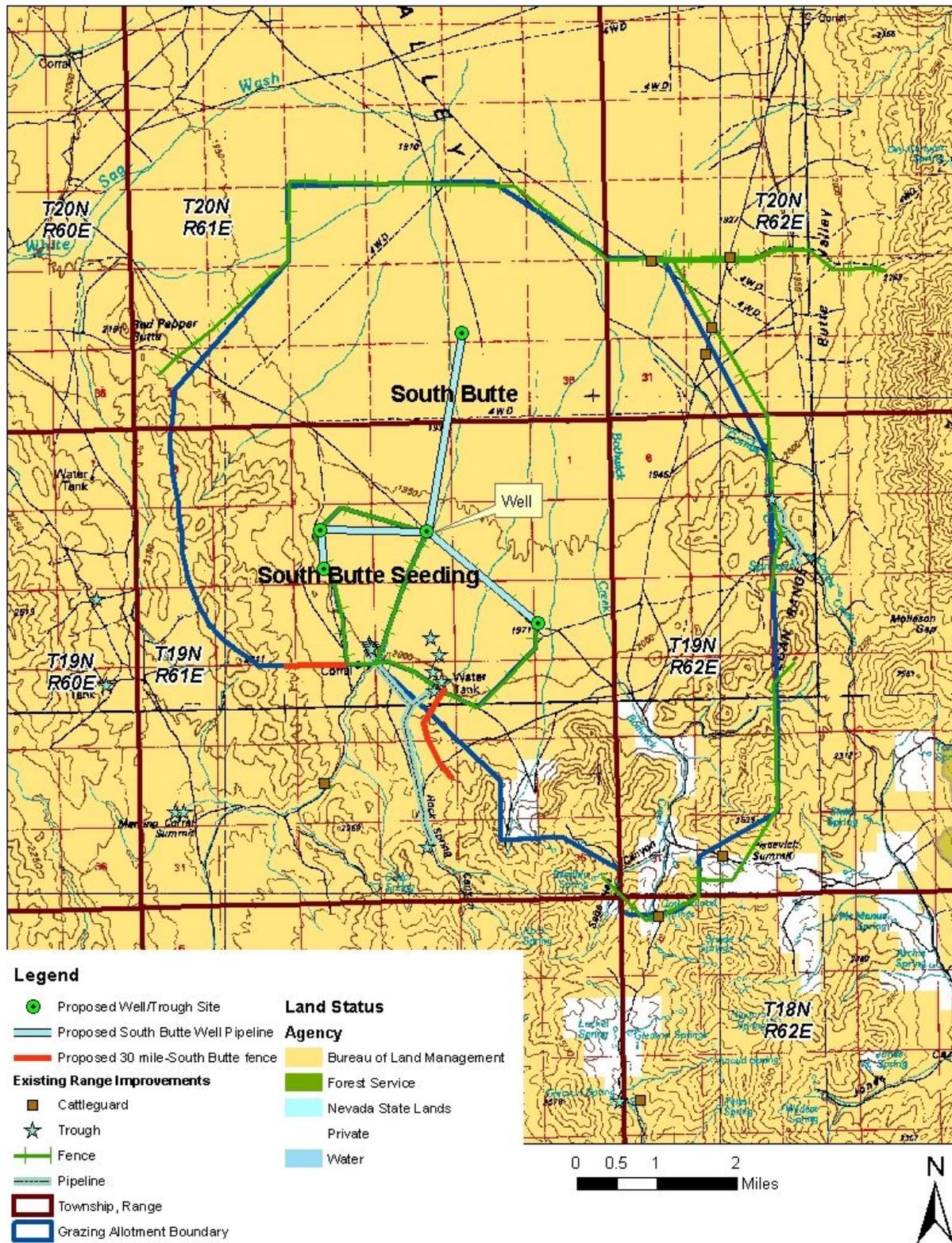
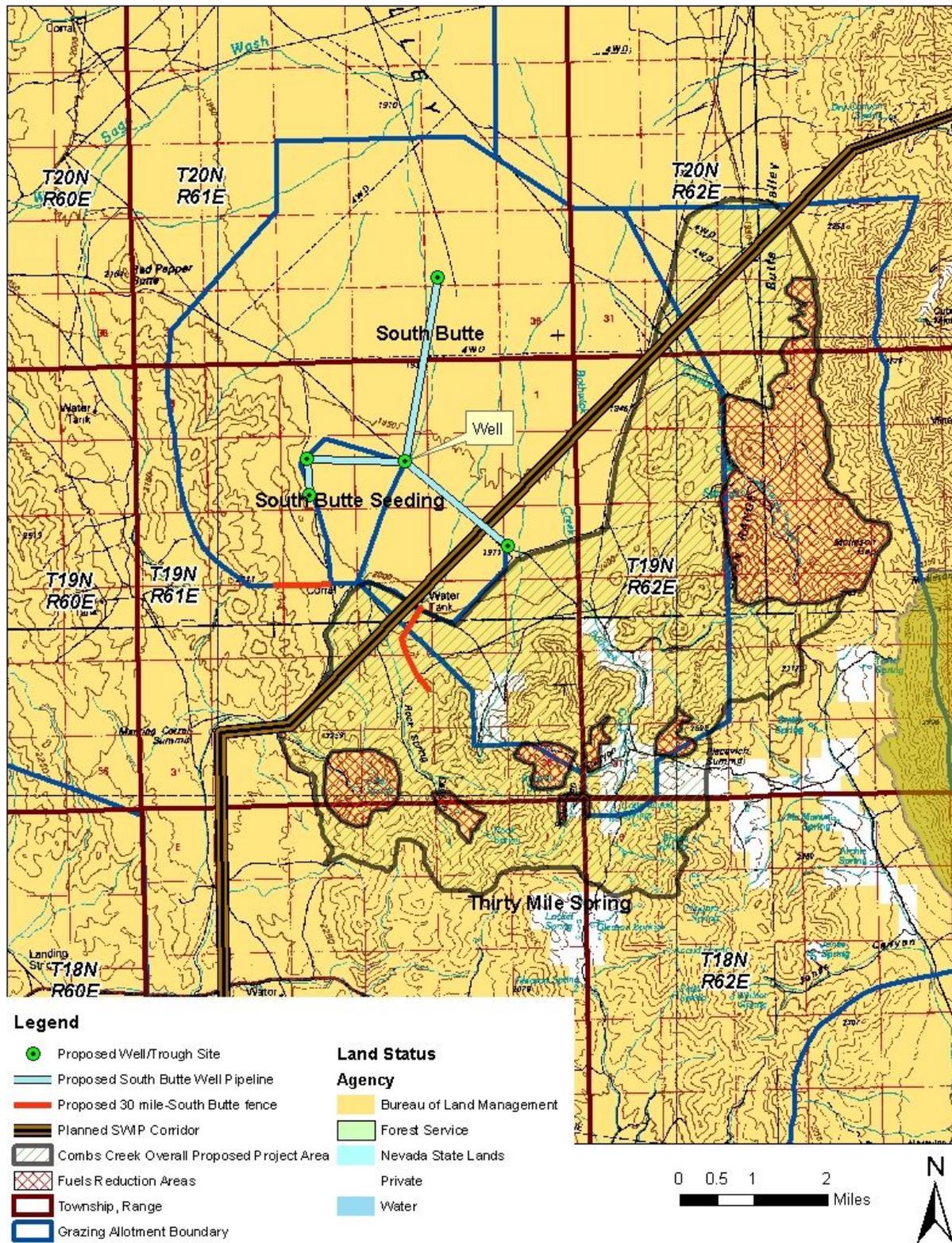


Figure 3. Proposed Project and Existing Range Improvements



**Figure 4. Proposed Project and Other Planned Projects**

## Appendix B. Migratory Birds

The following data reflect survey blocks and/or incidental sightings of bird species within the allotment boundaries from the Atlas of the Breeding Birds of Nevada (Floyd et al. 2007). These data represent birds that were confirmed, probably, or possibly breeding within the allotment boundaries. These data are not comprehensive, and additional species not listed here may be present within the allotment boundary.

No survey blocks or incidental sightings occur within in these allotments. Survey blocks with similar vegetation as these allotments, located near them, contained the following bird species:

American kestrel (*Falco tinnunculus*)

American robin (*Turdus migratorius*)

black-billed magpie (*Pica hudsonia*)

brown-headed cowbird (*Molothrus ater*)

black-headed grosbeak (*Pheucticus melanocephalus*)

Brewer's blackbird (*Euphagus cyanocephalus*)

\*Brewer's sparrow (*Spizella breweri*)

bushtit (*Psaltiriparus minimus*)

Cassin's finch (*Carpodacus cassinii*)

chukar (*Alectoris chukar*)

common nighthawk (*Chordeiles minor*)

common poorwill (*Phalaenoptilus nuttallii*)

common raven (*Corvus corax*)

dusky flycatcher (*Empidonax oberholseri*)

European starling (*Sturnus vulgaris*)

\*greater sage-grouse (*Centrocercus urophasianus*)

green-tailed towhee (*Pipilo chlorurus*)

house wren (*Troglodytes aedon*)

mourning dove (*Zenaida macroura*)

northern flicker (*Colaptes auratus*)

rock wren (*Salpinctes obsoletus*)

sage thrasher (*Oreoscoptes montanus*)

Savannah sparrow (*Passerculus sandwichensis*)

spotted towhee (*Pipilo maculatus*)

turkey vulture (*Cathartes aura*)

# Appendix C. RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

## Thirty Mile Spring and South Butte Allotments Boundary Fence and the South Butte Well and Pipeline.

### Proposed Action

BLM proposes to construct an allotment boundary fence and authorize a well with pipelines and troughs. See the description of the proposed action.

### No Action Alternative

The impacts from construction and installation of the project described in the proposed action would not occur if the project is not implemented.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. Hoary cress (*Lepidium draba*) is found adjacent to the fencing project.

The following species are found along roads or drainages leading to the projects:

Onopordum acanthum	Scotch thistle
Lepidium draba	whitetop/hoary cress
Carduus nutans	Musk thistle
Cirsium vulgare	bull thistle

While not officially inventoried the following weeds probably occur in or around the project area: cheatgrass (*Bromus tectorum*), bur buttercup (*Ceratocephala testiculata*), field bindweed (*Convolvulus arvensis*), halogeton (*Halogeton glomeratus*), horehound (*Marrubium vulgare*), and Russian thistle (*Salsola kali*). This area was last inventoried for noxious weeds in 2007.

Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For the proposed action, the factor rates as Moderate (4) at the present time. The ground disturbance created by the installation of the fencing and pipelines and the use of heavy machinery could lead to the introduction of new weed infestations to the project area.

*Appendix C RISK ASSESSMENT FOR NOXIOUS  
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Thirty Mile Spring and South Butte Allotments  
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For Alternative 1, the factor rates as Low (2) at the present time. No ground disturbance would occur, however indirect impacts by not dispersing livestock could occur to native plants including stressing them.

Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

The proposed action rates as High (8) at the present time. If new weed infestations establish within the project area this could have an adverse impact those native plant communities since the areas are currently considered to be mostly weed-free. Also, any increase of cheatgrass could alter the fire regime in the area. The no action rating would be moderate. No impacts from implementation would occur, however there could be cumulative effects to native vegetation due to stress by not dispersing grazing.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this proposed action, the Risk Rating is Moderate (32). This indicates that the project can proceed as planned as long as the following measures are followed:

- Prior to the entry of vehicles and equipment to a planned disturbance area, a weed scientist or qualified biologist will identify and flag areas of concern. The flagging will alert personnel or participants to avoid areas of concern.
- Prior to entering public lands, the contractor, operator, or permit holder will provide information and training regarding noxious weed management and identification to all personnel who will be affiliated with the implementation and maintenance phases of the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.

*Appendix C RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS*

*Thirty Mile Spring and South Butte Allotments  
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- To eliminate the transport of vehicle-borne weed seeds, roots, or rhizomes all vehicles and heavy equipment used for the completion, maintenance, inspection, or monitoring of ground disturbing activities; or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. All such vehicles and equipment will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the District Office Weed Coordinator or designated contact person.
- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for reclamation or stabilization activities, feed, bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District Office.
- Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.)
- Include noxious and invasive weed detection in all monitoring activities. If the spread of noxious or invasive weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations.

Reviewed by:	/s/Mindy Seal		8/3/2011
	Mindy Seal		Date
	Natural Resource Specialist		

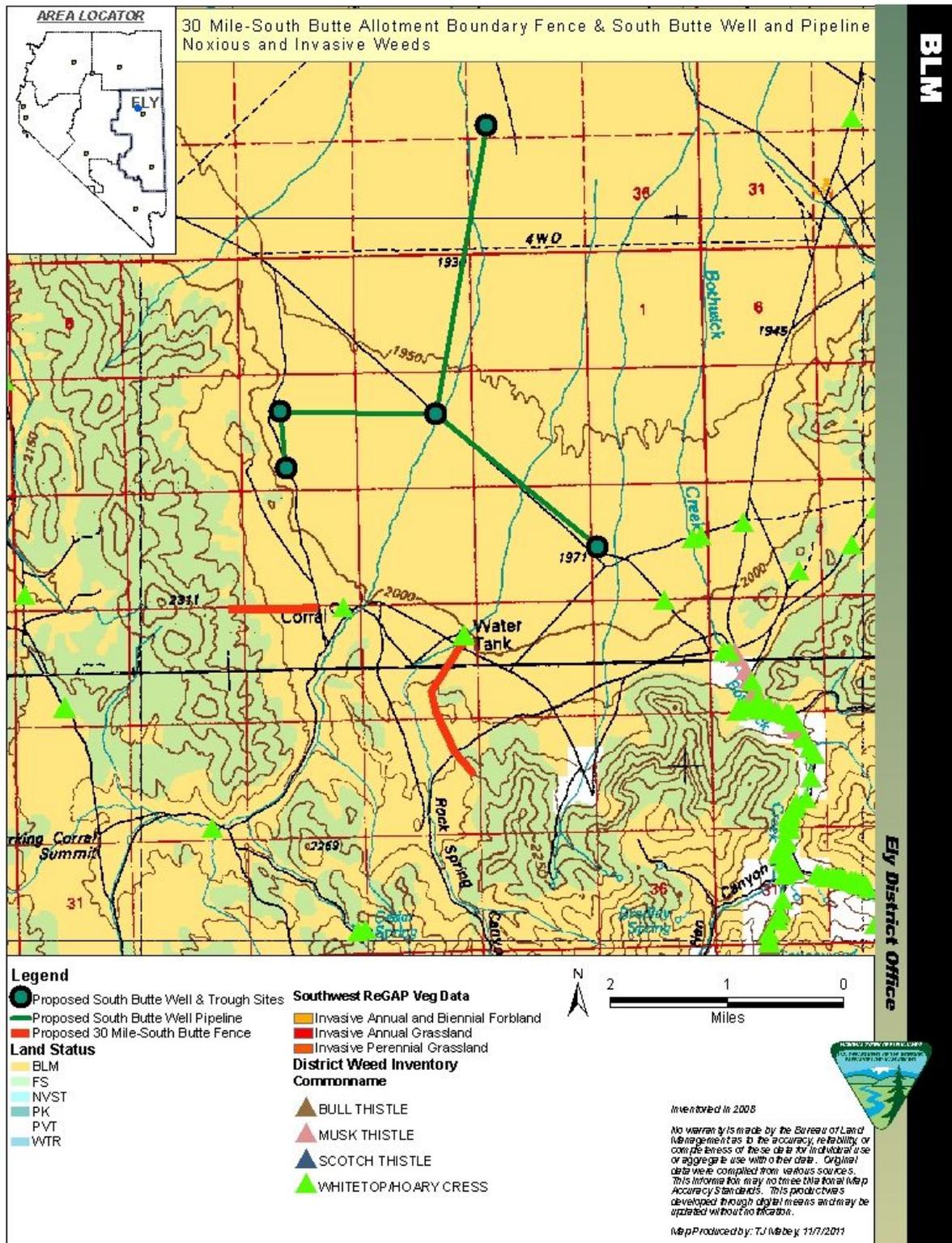


Figure C-1. Weed Risk Assessment Map

Appendix C RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS  
 Thirty Mile Spring and South Butte Allotments  
 Boundary Fence and the South Butte Well and Pipeline.