

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

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**Preliminary Environmental Assessment  
DOI-BLM-NV-L010-2010-0022-EA  
April 2012**

**MT. WHEELER POWER, INC.  
PESCIO SUBSTATION PROJECT**

**FLPMA TITLE V RIGHT-OF-WAY  
White Pine County, Nevada**

***Applicant:***

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# MT. WHEELER POWER PESCIO SUBSTATION PROJECT

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## **1.0 INTRODUCTION/PURPOSE AND NEED**

This Environmental Assessment (EA) has been prepared to analyze Mt. Wheeler Power, Inc.'s proposed Pescio Substation Project. An EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives to the proposed action. An EA assists the Bureau of Land Management (BLM) in project planning, ensuring compliance with the National Environmental Policy Act (NEPA), and determining whether any "significant" impacts could result from the analyzed actions.

This EA is tiered to, and incorporates by reference, the Final Environmental Impact Statement for the Ely Proposed Resource Management Plan (RMP) released in November 2007. Should a determination be made that implementation of the Proposed Action or an alternative action would not result in "significant environmental impacts" or "significant environmental impacts beyond those already disclosed in the existing NEPA document," a Finding of No Significant Impact will be prepared to document that determination. A Decision Record will be issued providing the rationale for approving the chosen alternative.

### **1.1 BACKGROUND**

Mt. Wheeler Power, Inc. submitted a Standard Form 229 Application for Transportation and Utility Systems and Facilities on Federal Lands to the BLM Egan Field Office in April 2009. In the amended application, Mt. Wheeler Power, Inc. requested to amend an existing right-of-way (ROW) authorization for the construction, operation, and maintenance of a proposed electrical substation and transmission line project (proposed project). The Proposed Action is to grant the requested amended ROW authorization.

Mt. Wheeler Power, Inc. would construct, operate, and maintain approximately an additional 11,172 feet (2.1 miles) of 69-kilovolt (kV) overhead transmission line, approximately an additional 2,450 feet (0.5 mile) of 35 kV overhead transmission line, a substation linking the two lines, and a maintenance road within the ROW. The requested ROW would be a 40-foot-wide corridor along the entire length of the 69 kV transmission line and a 25-foot-wide corridor along the length of the 35 kV transmission line. The ROW corridor would be centered on the overhead transmission line. The ROW would be 200 feet by 200 feet (0.9 acre) where the proposed substation would be constructed. The ROW would connect to an existing 65 kV transmission line and an existing 35 kV transmission line west of U.S. Highway 6 in White Pine County, about 15 miles southwest of Ely, Nevada (Figure 1). The requested ROW would include approximately an additional 12 acres and would contain the entire project, including any temporary construction disturbances.

## **1.2 PURPOSE OF THE PROPOSED ACTION**

The purpose of the BLM considering approval of the application for a ROW for the proposed project is to provide legitimate use of public lands to Mt. Wheeler Power, Inc. Legitimate uses are those that are authorized under the Federal Land Policy and Management Act (FLPMA) of 1976 or other Public Land Acts and meet the project objectives while preventing undue and unnecessary degradation.

The proponent's objective is to construct, operate, and maintain a new substation and transmission line to provide reliable electrical capacity to its Lund, Preston, Railroad Valley, and Duckwater service areas.

The need for the proposed project is the unreliability of the existing 35 kV transmission line that Mt. Wheeler Power, Inc. operates to provide electricity to customers in its Lund, Preston, Railroad Valley, and Duckwater service areas. North of the project area, the existing line crosses over high ridges and knolls where the pole structures attract lightning during storm events. Often, during and following a lightning storm, electrical supply to customers is interrupted due to damage to, or shorts in, the transmission line from lightning strikes. The project would provide a second, independent power transmission route to avoid the loss of service to customers in the event of a lightning-caused outage of the transmission line and transformers.

## **1.3 NEED FOR THE PROPOSED ACTION**

The BLM's need for the Proposed Action is to respond to obligations mandated under the FLPMA to manage public lands for multiple uses in a manner that recognizes the national demand for reliable energy.

## **1.4 RELATIONSHIP TO PLANNING**

### **1.4.1 Conformance with BLM Land Use Plan(s)**

The Proposed Action is in conformance with the following Goals and Objectives of the Ely District Record of Decision and Approved RMP (BLM 2008a):

- “Manage public lands in a manner that meets public, local, state, and federal agency needs for use authorizations such as rights-of-way, permits, leases, and easements while avoiding or minimizing adverse impacts to other resource values.” (page 65)
- “Respond to public, local, state, and federal agency needs for land for community development, utility and other associated rights-of-way, communication sites, and other allowed uses of BLM-administered lands.” (page 66)

In addition, management decisions for other resources and concerns that would possibly be impacted by the project were reviewed, and it was determined that approval of the Proposed Action would be in conformance with the Ely RMP.

#### **1.4.2 Relationship to Statutes, Regulations, or Other Plans**

This EA has been prepared in accordance with the following statutes and implementing regulations, policies, and plans:

- NEPA (of 1969), as amended (Public Law 91-190, 42 United States Code [USC] 4321, et seq.);
- Regulations for Implementing the Procedural Provisions of the NEPA (40 Code of Federal Regulations [CFR] 1500, et seq.);
- Council on Environmental Quality's Considering Cumulative Effects under NEPA (1997);
- Implementation of the NEPA; Final Rule, effective November 2008 (43 CFR 46);
- U.S. Department of the Interior requirements provided in Part 516, Chapters 1 through 15, of the Departmental Manual (U.S. Department of the Interior 2004);
- BLM NEPA Handbook (H-1790 1), as updated (BLM 2008b);
- Federal Water Pollution Control Act, otherwise known as the Clean Water Act of 1977 (Public Law 95-217, 33 USC 1251, et seq.);
- Native American Graves Protection and Repatriation Act, as amended (Public Law 101-601, 25 USC 3001, et seq.);
- National Historic Preservation Act of 1966, as amended (Public Law 89-665, 16 USC 470, et seq.);
- The Archaeological Resources Protection Act of 1979, as amended (Public Law 96-95, 16 USC 470aa-mm);
- White Pine County Public Lands Policy Plan (White Pine County Public Land Users Advisory Committee 2007); and,
- Institute of Electrical and Electronics Engineers National Electrical Safety Code.

#### **1.5 SCOPING AND PUBLIC INVOLVEMENT AND ISSUES**

Internal scoping was conducted on March 1, 2010, and February 17, 2011, by an interdisciplinary team of BLM resource specialists that analyzed the potential consequences of the Proposed Action. The following preliminary issues were identified during internal scoping:

- Would cultural resources and Native American religious concerns be affected?
- What potential impacts would occur to vegetation from the Proposed Action?
- What impacts would the Proposed Action have on wildlife and wildlife habitat?
- Would proposed pole structures have avian safety features to protect migratory birds, including raptors?
- What potential impacts to special status species would be expected?
- How would rangeland be impacted by the Proposed Action?
- What potential impacts to water resources would result from the Proposed Action?

- How would the existing visual character of the landscape be altered?
- Would public recreation be impacted by the Proposed Action?
- Could the length of new road that must be constructed be reduced by using an existing road for maintenance of the proposed project?

The issues identified above as well as several others that were identified during the development of this EA have been addressed in Section 3.3. Other issues identified during the development of this EA include the potential impacts to soils, air quality, and existing land uses and authorizations.

Scoping with Native American tribes was initiated during BLM internal scoping. Please see Sections 3.3.5 and 5.2 for details of Native American scoping. The preliminary EA was posted to the National NEPA Register and letters notifying interested members of the public of a 30-day comment period were sent on April 10, 2012.

## **2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION**

### **2.1 INTRODUCTION**

The previous chapter presented the purpose and need for the Proposed Action, as well as the relevant issues, or those elements that could potentially be affected by the implementation of the Proposed Action. Implementation of the Proposed Action would make the proposed project possible. The Proposed Action alternative, as well as a No Action alternative, are described in the following sections. The potential environmental impacts or consequences resulting from the implementation of each alternative are then analyzed in Chapter 3 for each of the identified issues.

### **2.2 ALTERNATIVE A - PROPOSED ACTION**

The Proposed Action is to grant authorization of requested amendment of ROW NVN-17924 in order to permit Mt. Wheeler Power, Inc. to provide reliable electrical capacity to parts of White Pine County. Mt. Wheeler Power, Inc. proposes to construct, operate, and maintain approximately an additional 11,172 feet of 69 kV overhead transmission line, approximately an additional 2,450 feet of 35 kV overhead transmission line, a substation linking the two lines, and a maintenance road within the ROW (Figure 2). The requested ROW includes approximately an additional 12 acres and consists of the following:

- a 40-foot-wide corridor centered on and containing the entire length of the 69 kV transmission line and a maintenance road;
- a 25-foot-wide corridor centered on and containing the entire length of the 35 kV transmission line and a maintenance road; and,
- a 200-foot by 200-foot area containing the proposed substation.

The ROW area extends between an existing 69 kV transmission line and an existing 35 kV transmission line west of U.S. Highway 6 in White Pine County, about 15 miles southwest of Ely (Figure 1). The ROW area would occur in parts of section 1, 11, 12, and 14 of Township 14 North (T14N), Range 61 East (R61E), Mount Diablo Base and Meridian.

The proposed project area is located entirely on public lands administered by the BLM (Figure 3). Because construction activities would be limited to the project area, no more than 12 acres could be disturbed by the Proposed Action. It is anticipated that actual disturbance would be less and would be concentrated at pole structures, wire pull sites, staging areas, and the substation site. Most disturbances would be temporary for the duration of construction and establishment of reclamation seeding. Approximately 8.8 acres of surface disturbance would be temporary; the remaining 3.3 acres would be permanent. Detailed construction, operation, and reclamation procedures for the proposed project are provided in the following sections.

## **2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION**

## 2.2.1 Construction Procedures

### General Construction Practices

The Nevada Contractors Field Guide for Construction Site Best Management Practices (Nevada Division of Environmental Protection 2008) and State of Nevada Non-Designated Area Water Quality Management Plan, Handbook of Best Management Practices (Nevada Division of Environmental Protection 1994) would be used as guides during construction activities. Mt. Wheeler Power, Inc. would implement best management practices throughout construction. The transmission lines and substation would be designed, constructed, tested, operated, and maintained in accordance with state and federal regulations, including the National Electrical Safety Code. Any areas temporarily disturbed during construction of the proposed project would be reclaimed immediately after construction activities are completed.

### Transmission Line Conductors and Pole Structures

The proposed transmission line conductors (i.e., wires) would be typical steel-reinforced aluminum conductors. Wooden pole structures would be utilized to support the conductors and suspend them above the ground surface. Angle pole structures would also be wooden but would require the addition of steel guy wires and soil anchors. The quantity, average height, and related details regarding the proposed pole structures are provided in Table 1.

**Table 1 Proposed Pole Structure Details**

<b>Transmission Line</b>	<b>Type of Structure</b>	<b>Span Distance</b>	<b>Number Required</b>	<b>Height Above Ground Surface</b>	<b>Surface Disturbance per Structure</b>
35 kV	Single-Pole	215 feet	10	34 - 40 feet	0.002 acre
69 kV	Single-Pole and/or H-Frame Two-Pole	350 feet	30	55 - 65 feet	0.004 acre

Construction of the transmission lines would include site preparation where each proposed pole structure would be located, creating a maintenance road and staging areas, assembling and raising structures, and installing conductor and shield wires. Site preparation of the proposed structure locations would consist of clearing vegetation and excavating holes for the pole structures to rest upright in. The holes would be excavated to an average depth of 6 to 9 feet below ground surface. The proposed maintenance road would be created and used during construction of the pole structures. Staging areas would be developed as necessary during construction and would generally be located on, or immediately adjacent to, the proposed maintenance road. The various parts of the proposed pole structures, including the wooden poles and cross-arms, insulators, hardware, and guy wire and anchors, would be hauled by vehicle on the maintenance road from the staging areas to the individual pole structure sites where assembly would commence. A boom truck would likely be used to raise and place the base end of assembled pole structures in the excavated holes.

## 2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

The installation of conductors and shield wires onto the raised structures would involve installing a lead-line through travelers on each structure, attaching conductors and shield wires to the lead-line, and tensioning conductors appropriately. This process would be performed at wire pull/set-up sites located along the proposed power line corridor. The exact locations of wire sites would be determined during construction and would be dependent upon the terrain and engineering requirements. Once the proper tension is achieved at wire pull sites, the conductors and shield wires would be permanently clipped into the clamps located on each pole structure.

#### Substation Site

Site preparation would be the initial construction activity performed at the proposed substation site. The natural topography of the site is near flat, so site preparation would be anticipated to require only minor grading and/or excavation. Once site preparation is finished, a 16-foot by 12-foot concrete pad would be constructed near the center of the substation area. After it is cured, a transformer would be positioned on the pad and the 69 kV and 35 kV conductors would be connected to it. A 7-foot-tall chain-link fence topped with one or more strands of barbed wire would be constructed around the transformer pad, enclosing an approximately 140-foot by 125-foot area. Two secured 10-foot-wide swinging gates would be installed to allow maintenance personnel access to the substation structures from the proposed maintenance road. Gravel would be placed atop the ground surface within the fenced area.

#### Maintenance Road

Existing unpaved roads and trails between the proposed project area and U.S. Highway 6 would be used to access the project area. Where there is no existing road, a new 10-foot-wide bladed dirt road with the possibility of added gravel would be constructed according to BLM specifications. The road would be constructed within the ROW and aligned generally parallel with the overhead transmission line. The road would be used during construction for access to the pole structure sites, staging areas, and tension/pull areas. Following construction, the road would remain in place to provide access for maintenance activities.

#### Gravel Source

Approximately 12,000 cubic-yards of gravel would be required for the proposed project. Depending on site conditions during construction and during routine maintenance of the project, less gravel may be required than anticipated. Likewise, conditions may warrant the need for additional gravel beyond the 12,000 cubic-yards that are anticipated to be sufficient. Gravel would be obtained from the nearest private land parcel where an adequate and available gravel supply exists. Mt. Wheeler Power, Inc. would negotiate a purchase contract with the land owner for the gravel. Mt. Wheeler Power Inc. may acquire gravel from one or more sources on private land as necessary to obtain an adequate supply.

## 2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

### **2.2.2 Construction Schedule, Workforce, and Equipment**

Construction would commence following authorization of the Proposed Action and after all other necessary federal, state, and local permits are obtained. Mt. Wheeler Power, Inc. anticipates that construction would be completed within the 3 to 6 months following authorization of the Proposed Action and after all other necessary permits are obtained. Adverse weather conditions, personnel absence, or other unforeseen circumstances that would be prohibitive to construction may lengthen the construction period. Construction would typically occur Monday through Friday, between sunrise and sunset. No construction would occur between sunset and sunrise. The pole structures and maintenance road would be constructed first. The maintenance road would be created along the length of the proposed transmission line as construction of pole structures progresses. After construction of pole structures is complete, conductors and shield wires would be installed. The substation site would be constructed after the transmission line structures are in place and wired. Reclamation of temporary construction disturbance would be performed after construction activities are completed.

Mt. Wheeler Power, Inc. anticipates that the workforce would comprise 8 to 10 personnel members, which would include linemen, laborers, and equipment operators. Construction equipment would consist of 8 to 10 trucks and trailers, a boom truck, a wire pull truck, a digger truck, and a backhoe. A water truck would also be present in order to lightly mist areas of exposed soils in order to reduce fugitive dust emissions. Restroom facilities available to personnel would consist of a portable chemical toilet stored within the project area during construction. A local contractor would be utilized to clean and remove waste from the chemical toilet.

### **2.2.3 Reclamation**

All construction equipment, surplus material, and debris, as well as the portable chemical toilet and all other wastes or byproducts of the proposed project, would be removed from the project area once construction is finished. All construction debris would be disposed of as appropriate within permitted landfill sites. No trash would be buried at the project area. Best management practices implemented during construction would remain implemented during reclamation activities when applicable. If necessary, additional best management practices would be implemented during reclamation activities per the Nevada Division of Environmental Protection guidelines (1994, 2008). The Nevada Guidelines for Revegetation (Nevada State Clearinghouse 1998) would be used as a guide for establishing vegetation on reclaimed surfaces.

Topsoil would be removed from areas disturbed during construction and stockpiled within the project area to use for reclamation. Stockpiled topsoil would be seeded with an annual seed source to prevent erosion of the topsoil piles. All temporary staging areas, wire sites, or other areas of the requested ROW disturbed during construction of the

proposed project would be reclaimed by contouring and seeding. Contouring would consist of grading disturbed areas to approximate pre-construction contours. A certified weed-free seed mix would be applied to reclaimed surfaces. The proposed reclamation seed mix and application rate in pounds per acre of pure live seed are provided in Table 2. Reclamation would not occur within the fenced area surrounding the substation site or where the proposed pole structures and maintenance road are located.

**Table 2 Reclamation Seed Mix and Application Rate\***

Species	Percent of Seed Mix	Seeds per Acre	Seeds per Pound	Pure Live Seed Pounds per Acre
Indian ricegrass ( <i>Achnatherum hymenoides</i> )	20	348,480	205,000	1.70
Bluebunch wheatgrass ( <i>Pseudoroegneria spicata</i> spp. <i>spicata</i> )	15	261,360	125,000	2.10
Crested wheatgrass ( <i>Agropyron christatum</i> )	15	261,360	200,000	1.30
Lewis flax ( <i>Linum lewisii</i> )	10	174,240	420,000	0.40
Palmer's penstemon ( <i>Penstemon palmeri</i> )	5	87,120	600,000	0.15
Black sagebrush ( <i>Artemisia nova</i> )	20	348,480	900,000	0.39
Shadscale ( <i>Atriplex confertifolia</i> )	15	261,360	65,000	4.00
<b>Total pounds of pure live seed per acre:</b>	<b>100</b>	<b>1,742,400</b>		<b>10.1</b>

**\* Notes:**

- Quantitative values in Table 2 are based on drill seeding application rate.
- BLM makes no guarantees of seeding success. Project proponent is responsible for meeting vegetative objectives when reclaiming a project area.
- Seeding rates given for Great Basin plants are the recommended single species drilled seeding rates. Aerial or broadcast seeding rates are usually 1.5 to 2.0 times the drilled seeding rate. BLM applies seed based on the pure live seed rate, measured in pounds per acre. Pure live seed is the percent pure seed multiplied by the percent of pure seed germination rate for the individual seed lot.
- All seed, native and non-native, will meet or exceed Seed Certification standards for the species or cultivar. The seed standards for each species used will meet or exceed minimum purity, minimum germination, and contain no noxious weed seed and less than 2 percent other crop seed.

## 2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

#### **2.2.4 Operation and Maintenance**

Mt. Wheeler Power, Inc. would operate the proposed project continuously once the proposed transmission line and substation are energized. In order to maintain safe and reliable operations, Mt. Wheeler Power, Inc. would perform periodic inspections and maintenance of the proposed transmission lines, pole structures, and substation site. Vegetation which Mt. Wheeler Power, Inc. determines a potential hazard to the transmission line would be cut and cleared as needed through the life of the project. Mt. Wheeler Power, Inc. would notify the BLM of the number, species, and size of the individual plants that would be cleared prior to initiating and performing vegetation clearing. The cleared vegetation would either be removed from the ROW or chipped to mulch and left within the ROW. Taller species such as Utah juniper (*Juniperus osteosperma*) would be most likely to represent a potential hazard to the transmission line. The proposed maintenance road would be used to access the pole structures, transmission lines, and substation site during maintenance and inspection activities. Mt. Wheeler Power, Inc. would also maintain the proposed road as necessary. Road maintenance would include repairing washouts and applying gravel to specific lengths of the road surface where needed.

When access is required for non-emergency maintenance and repairs, Mt. Wheeler Power, Inc. would adhere to the same precautions taken during the original construction. Mt. Wheeler Power, Inc. would adhere to all ROW stipulations provided by the BLM. Emergency maintenance would involve prompt movement of crews to repair or replace any damage. Crews would be instructed to protect plants, wildlife, and other environmental resources. Reclamation of surface disturbance resulting from repair work would be similar to the reclamation activities performed for construction disturbance.

Mt. Wheeler Power, Inc. anticipates that the proposed project would be operated for 30 years. After 30 years of operation, Mt. Wheeler Power, Inc. would deconstruct the transmission line and substation site and remove all of the material from BLM-administered public land. Areas where project components were located prior to removal and any areas disturbed during the deconstruction process would be reclaimed and seeded in accordance with Section 2.2.3. Alternatively, Mt. Wheeler Power, Inc. may apply for renewal of the ROW authorization and continue to operate the proposed project beyond the initial 30 years.

#### **2.2.5 Environmental Protection Measures**

The following environmental protection measures are incorporated into the proposed project in order to avoid and/or mitigate potential adverse effects.

##### Solid Waste and Spill Control

- Mt. Wheeler Power, Inc. would implement standard refueling procedures for heavy equipment that is left in the project area for long periods of time, such as

the backhoe or boom truck. This equipment would be refueled in place. However, no personal or light-duty equipment would be refueled within the project area.

- Containment would be provided for any trash stored at the project area. Spill kits would be kept at the project area during construction and reclamation, and absorbent material would be placed under leaking equipment immediately to prevent ground contamination. Spills in excess of 5 gallons would be reported to the Nevada Division of Environmental Protection at 888-331-6337. Mt. Wheeler Power, Inc. will notify the BLM Authorized Officer of any hazardous or solid waste discoveries within the Ely BLM District. Mt. Wheeler Power, Inc. will also notify the Authorized Officer of any hazardous or solid waste spills while under permit within the Ely BLM District.
- The project area shall be maintained in a sanitary condition at all times; litter shall be disposed of promptly at an authorized solid waste disposal site. Failure to remove litter may result in assessment of damages by the BLM Authorized Officer. "Litter" means all discarded matter including but not limited to trash, garbage, ashes, and equipment. The project area must be maintained and left in a clean and safe condition.
- No known human health and safety concerns will be present. Mt. Wheeler Power, Inc. and its contractors will follow all federal, state and local laws and regulations during all phases of construction. All Occupational Safety and Health Administration (OSHA) standards will be maintained in reference to excavating, trenching and confined space requirements. The crew foreman would be responsible for maintaining compliance with applicable laws and regulations.
- No paint or permanent discoloring agents would be applied to rocks or vegetation to indicate limits of the proposed project area or construction activities.

#### Air Quality

- Mt. Wheeler Power, Inc. would adhere to all requirements of entities having jurisdiction over air quality. Any permits needed for construction activities would be obtained. Open burning of construction trash would not be permitted.
- Access to parts of the project area away from the proposed maintenance road would be by overland travel whenever possible to minimize grading. Access roads would be staked and bladed only if necessary. Gravel surfacing of the proposed maintenance road would be performed when and where needed. A maximum travel speed of 25 miles per hour would be observed to prevent excessive amounts of airborne dust.
- Equipment and vehicle idling times would be minimized. Construction equipment idling for more than 15 minutes would be shut off.

## 2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

Cultural Resources and Native American Religious and Other Concerns

- Mt. Wheeler Power, Inc. will comply with the Archaeological Resources Protection Act (43 CFR 7) and the Native American Graves Protection and Repatriation Act (43 CFR 10). These acts provide protection to historic properties, cultural resources, archaeological sites, and Native American funerary items and/or physical remains located on BLM-administered land. In addition, the Archaeological Resources Protection Act provides for the assessment of criminal and/or civil penalties for damaging cultural resources.
- If previously undiscovered archaeological sites, historic properties or items, traditional cultural properties, artifacts (e.g., stone tools, projectile points, etc.), or Native American gravesites are discovered during construction, all activity in the vicinity of the discovery would be stopped. Mt. Wheeler Power, Inc. will, immediately upon such discovery, notify the field manager of the BLM Egan Field Office by telephone and provide written notification to the field manager for confirmation. The location of the discovery would not be disclosed to the public, and the discovery would be secured and preserved in place until a Notice to Proceed is issued by the authorized officer.

Paleontology

- The geologic substrate within the project area is alluvium and not conducive to preservation of fossils or paleontological resources. If, however, a paleontological discovery occurs during construction, Mt. Wheeler Power, Inc. would stop construction in the discovery area and notify the BLM Egan Field Office. Construction in the discovery area would not resume until a Notice to Proceed is issued by the BLM. The discovery location would not be disclosed to the public.

Soils and Water Quality

- All surface-disturbing activities would be limited to the requested ROW (i.e., project area). Disturbance would be minimized to the extent possible within drainages that cross the project area.
- Mt. Wheeler Power, Inc. would implement best management practices at all times during construction. Best management practices are defined by the Nevada Division of Environmental Protection in the State of Nevada Non-Designated Area Water Quality Management Plan, Handbook of Best Management Practices (1994) and the Nevada Contractors Field Guide for Construction Site Best Management Practices (2008).
- Disturbed areas that would not be utilized for operation or maintenance of the system would be reclaimed to their pre-construction contours and seeded with an erosion control seed mix.

2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

- Erosion control measures, including but not limited to silt fencing, diversion ditches, water bars, temporary mulching and seeding, and application of gravel or riprap, would be installed, where necessary, immediately after completion of construction activities to avoid erosion and runoff.

#### Wildlife and Wildlife Habitat

- Personnel would be strictly forbidden from interacting with or disturbing wildlife or intentionally disturbing wildlife habitat for any reason other than performing BLM-authorized activities. This policy extends to avian nests and the structures or vegetation where nests are located. Sensitive wildlife habitat would be avoided to the extent possible. Overland travel, vegetation removal, and construction times would be minimized to the extent possible while working within sensitive wildlife habitat.
- Mt. Wheeler Power, Inc. would observe a maximum speed limit of 25 miles per hour when operating equipment within the project area to prevent collisions with wildlife.
- To prevent injury of wildlife, construction excavations or holes left open overnight or during periods when personnel are not present nearby would be covered with plywood, particle board, or other pieces of large scrap lumber.

#### Wildland Fire Prevention

- Mt. Wheeler Power, Inc. would implement precautionary measures in order to prevent wildfires during construction of the proposed project. Adequate firefighting equipment would be kept on-site at all locations where active construction is occurring. Firefighting equipment would include shovels, Pulaski axes, fire extinguishers, water supplies, or similar tools and equipment.
- Mt. Wheeler Power, Inc. would report all wildfires to the BLM Central Nevada Interagency Dispatch Center immediately upon discovery.

#### Noxious Weeds and Invasive Species

- Mt. Wheeler Power, Inc. would minimize the potential for the establishment of noxious weeds and spread of invasive species. All surface-disturbing activities would be limited to the requested ROW. Disturbed areas that would not be utilized for operation or maintenance of the proposed project would be reclaimed to their pre-construction contours and seeded. The seed mix would be certified weed-free. Mt. Wheeler Power, Inc. would be responsible for treating any noxious weeds within the ROW. The control measures that would be implemented to treat noxious weeds would be coordinated with the BLM and approved prior to implementation.

## 2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

**2.3 ALTERNATIVE B - NO ACTION**

Under the No Action alternative, the BLM would not grant the requested ROW and construction of the proposed project would not occur. The Lund, Preston, Railroad Valley, and Duckwater service areas would continue to experience outages associated with the unreliability of the existing transmission line.

### 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

#### 3.1 INTRODUCTION

This chapter presents the existing environment (i.e., the physical, biological, social, and economic values and resources) of the impacted area, the issues analyzed, potential impacts to the analyzed resources, and mitigation that could be applied to reduce those impacts.

The potential impacts to the resources and concerns listed in Table 3 were evaluated in accordance with the conditions listed in BLM NEPA Handbook (H-1790-01) (BLM 2008b) to determine if detailed analysis was required. Consideration of some of the resources or concerns in Table 3 is required for compliance with laws, statutes, or executive orders that impose certain requirements upon all federal actions. Other resources and concerns are considered because they are relevant to the management of public lands in general or are required specifically by the BLM Ely District Office. A rationale of why the resources and concerns not carried forward for detailed analysis is provided in the table for those that were dismissed.

**Table 3 Supplemental Authority Elements and Other Resources Analysis Summary**

<b>Resource/Concern</b>	<b>Issue(s) Analyzed? (Y/N)</b>	<b>Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis</b>
Air Quality*	Y	Impacts are assessed in Section 3.3.1.
Area of Critical Environmental Concern*	N	The project area is not within an Area of Critical Environmental Concern.
Cultural Resources*	Y	Impacts are assessed in Section 3.3.2.
Forest Health*	N	The proposed project does not meet Healthy Forest Restoration Act criteria.
Rangeland Health*	Y	Impacts are assessed in Section 3.3.3.
Migratory Birds*	Y	Impacts are assessed in Section 3.3.4.
Native American Religious and other Concerns*	Y	Impacts are assessed in Section 3.3.5.
U.S. Fish and Wildlife Service listed or proposed for listing Threatened or Endangered Species or critical habitat*	N	A query of U.S. Fish and Wildlife Service listed species records was performed for White Pine County in March 2011. There are records of two listed species in White Pine County; both species are fish. There is no fish habitat in the project area, and the Proposed Action would not affect fish. The project area does not contain habitat for listed or proposed species, and a biological survey of the area confirmed this conclusion.
Wastes, Hazardous or Solid*	N	The Proposed Action would not generate any hazardous wastes. Solid wastes resulting from construction activities would be removed from the project area and disposed of at an authorized landfill.

Resource/Concern	Issue(s) Analyzed? (Y/N)	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Water Quality, Surface/Ground*	Y	Impacts to surface water quality are assessed in Section 3.3.6. The proposed project would not be anticipated to encounter any groundwater aquifers or result in impacts to groundwater quality.
Environmental Justice*	N	According to the U.S. Environmental Protection Agency's online environmental justice mapping tool, "EJ View," there are no minority populations or low-income populations in the project area or surrounding locality. Environmental justice issues would not result from the Proposed Action.
Floodplains*	N	There are no 100-year floodplains within or near the limits of the proposed ROW as mapped by the Federal Emergency Management Agency.
Prime and unique farmlands*	N	Prime and unique farmlands do not occur within the project area.
Wetlands/Riparian Zones*	N	There are no wetland areas or riparian zones within the project area.
Non-Native Invasive and Noxious Species*	Y	Impacts are assessed in Section 3.3.7.
Special Status plant and animal Species, other than those listed or proposed by the U.S. Fish and Wildlife Service as Threatened or Endangered.	Y	Impacts are assessed in Section 3.3.8.
Wilderness/Wilderness Study Area*	N	There are no designated wilderness areas or wilderness study areas in the project area. There are no federal lands designated as wild lands in the project area.
Wild Horses	N	Wild horses would not be anticipated to be affected by the proposed project.
Fish and Wildlife	Y	Impacts are assessed in Section 3.3.9.
Soils Resources	Y	Impacts are assessed in Section 3.3.10.
Visual Resources Management	Y	Impacts are assessed in Section 3.3.11.
Lands and Realty	Y	Impacts are assessed in Section 3.3.12.
Recreation	Y	Impacts are assessed in Section 3.3.13.

### 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

Resource/Concern	Issue(s) Analyzed? (Y/N)	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Paleontological Resources	N	The predominant geologic substrate in the project area has been mapped as Quaternary alluvium by the U.S. Geological Survey. Typically, coarse Quaternary alluvium in the Great Basin contains no fossil remains because the deposition forces are not conducive to fossil preservation. Environmental protection measures described in Section 2.2.5 would protect any paleontological resources should they be discovered during construction.
Human Health and Safety*	N	The Proposed Action is not an herbicide project and would not present any public human health or safety issues.
Water Resources (Water Rights)	N	The Proposed Action would not require the use of water to construct, operate, or maintain. There would be no impact to the existing allocation of water rights in the area.
Mineral Resources	N	The proposed project area would not contain or cross any mining claims or interfere with mining activities elsewhere. There are no known mineral deposits within or adjacent to the project area.
Vegetative Resources	Y	Impacts are assessed in Section 3.3.14.

\*Nevada Supplemental Authority

### 3.2 GENERAL SETTING

The proposed project area consists of approximately an additional 12 acres of BLM-administered public land in White Pine County, approximately 15 miles southwest of Ely (Figure 1). U.S. Highway 6 is located approximately 450 feet west of the project area. An unpaved road is parallel and adjacent to much of the project area, and numerous other unpaved roads cross the project area. The proposed transmission line would connect to an existing 35 kV transmission line located approximately 3,000 feet west of U.S. Highway 6 and to a 69 kV transmission line located just west of the highway (Figure 2).

The topography within the proposed project area is gently sloping to near flat (Figure 4). Elevations range from about 6,160 to 6,240 feet above sea level (U.S. Geological Survey 1990). Hot summers, cold winters, and wide diurnal fluctuations characterize the climate of the area. Winter temperatures as low as -30 degrees Fahrenheit and summer temperatures as high as 101 degrees Fahrenheit have been recorded at the Ely Weather Bureau Office, which is about 17 miles northeast of the project area (Western Regional Climate Center 2011). The average annual precipitation recorded at the Ely Weather Bureau Office is 9.68 inches. Precipitation is least abundant during summer months, when the average monthly rainfall is less than 0.75 inch. March, April, and May are typically the wettest months, with an average monthly rainfall total of approximately 1 inch. The average annual snowfall is reported at 53.5 inches (Western Regional Climate Center 2011).

### 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

### **3.3 RESOURCES/CONCERNS ANALYZED - PROPOSED ACTION**

#### **3.3.1 Air Quality**

##### **3.3.1.1 Affected Environment**

The U.S. Environmental Protection Agency Office of Air Quality Planning and Standards and the Nevada Division of Environmental Protection have set ambient air quality standards for the following criteria pollutants: nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter smaller than 2.5 and 10 microns in aerodynamic diameter, ozone, and lead. The Nevada Division of Environmental Protection has also established ambient air quality standards for hydrogen sulfide. Minimum ambient air quality standards are provided in Nevada Administrative Code 445B.22097.

An area is considered to be in attainment when monitoring data shows that the concentrations of criteria air pollutants in the area are less than the minimum allowable concentrations specified in the ambient air quality standards. Conversely, an area is considered to be in nonattainment for a pollutant if concentrations of a criteria pollutant is in excess of the ambient air quality standard. An area is considered unclassifiable if no monitoring has been performed to determine its classification status and violations of ambient air quality standards would not otherwise be expected (Nevada Division of Environmental Protection 2011).

In Nevada, the extent of an area's classification corresponds to the Hydrographic Area boundaries as established in 1979 (Nevada Division of Environmental Protection 2011). The proposed project area is located in the White River Valley Hydrographic Area (Hydrographic Area 207). Monitoring stations are not operated in White Pine County, including the White River Valley Hydrographic Area. Therefore, the attainment status of the project area is considered unclassifiable.

##### **3.3.1.2 Impact Analysis**

Air quality would be impacted within the vicinity of the project area by temporary dust and combustion emissions. Up to an additional 12 acres of surface disturbance would occur during construction and would increase dust mobilization. Surface disturbances over 5 acres in size require a Surface Area Disturbance Permit from the Nevada Division of Environmental Protection Bureau of Air Pollution Control. The permit would require Mt. Wheeler Power, Inc. to develop a Dust Control Plan that lists best practical methods for control of dust emissions. The Dust Control Plan and temporary 3- to 6-month period that dust emission would occur would have a minimal impact on air quality.

Combustion emissions would occur temporarily when internal combustion engines are actively powering equipment during the 3- to 6-month construction period. Environmental protection measures would require idling equipment engines to be shut off, effectively reducing the period that combustion would occur during construction. Emissions would be anticipated to become dispersed within close proximity to the project

area due to winds and the relatively minimal volume of emissions that would be expected. Potential maintenance of the proposed project would occur only occasionally and would require minimal equipment. Combustion emissions during maintenance activities would be negligible. Impacts to air quality would be minimal and temporary.

### **3.3.2 Cultural Resources**

#### **3.3.2.1 Affected Environment**

Cultural resources consist of historic and prehistoric sites of interest and may include structures, archaeological sites, or religious sites of importance to Native American culture. In accordance with Section 106 of the National Historic Preservation Act, the BLM must consider how its actions and undertakings could potentially affect cultural resources. The process that federal agencies should implement to ensure compliance with the National Historic Preservation Act is found in the Section 106 implementing regulations (36 CFR 800). In 2009 the Nevada State Historic Preservation Office and BLM entered into a State Protocol Agreement, further streamlining the consultation process.

The avoidance of historic properties is the preferred policy of the BLM and should be implemented when possible. The State Protocol Agreement provides standard measures to utilize for avoidance. When avoidance is not possible or feasible, mitigation becomes necessary. The BLM in consultation with the State Historic Preservation Officer will determine the necessary type of mitigation to be implemented. Per the State Protocol Agreement, if a historic property is inadvertently discovered, all activities within 100 meters of the discovery are to be halted and the discovery is to be appropriately protected, until the BLM Authorized Officer issues a Notice to Proceed. If an adverse effect is found, BLM will initiate necessary procedures.

A Class III cultural resource inventory of the proposed project area was performed by Chambers Group, Inc. during spring 2011. Seven previously unrecorded archaeological sites were recorded during the inventory. One of the sites is a historic trail/road alignment, which has been recommended eligible to the National Register of Historic Places.

#### **3.3.2.2 Impact Analysis**

The historic Midland Trail/U.S. Highway 6 alignment is the only site recommended as eligible for listing in the National Register of Historic Places. Because it is recommended as eligible, the environmental protection measures listed in Section 2.2.5 would preclude construction of pole structures, the substation site and fence, and the maintenance road from occurring on the historic alignment. During construction, project equipment would cross the alignment in one or two locations but would travel over the existing alignment surface and would not blade, apply gravel, or otherwise alter the alignment at these crossings. If cultural resources are discovered during construction, environmental protection measures listed in Section 2.2.5 would ensure impacts are avoided.

While construction would not occur on the historic alignment, it would occur next to it along much of the proposed ROW parallel to U.S. Highway 6. The proposed transmission line, pole structures, and maintenance road would not be anticipated to alter the setting of the historic alignment. These project components would be similar to existing transmission lines and unpaved roads that are adjacent to the historic alignment north of the project area. Because there are no existing substations nearby, the addition of the proposed substation would be out of character at the site and impact the resource by altering the setting. With the mitigation measure listed in Section 3.3.2.3 implemented, however, the impact that visual alterations would have on the historic Midland Trail/U.S. Highway 6 alignment would be minimal.

### **3.3.2.3 Mitigation Measures**

Components of the proposed substation that are higher than the immediately adjacent vegetation, and that can be safely painted, would be painted a gray color that closely matches the color of shadows found in the surrounding natural landscape.

### **3.3.3 Rangeland Health**

#### **3.3.3.1 Affected Environment**

The proposed project would occur within the Giroux Wash Grazing Allotment (0826), which consists of approximately 48,200 public land acres. This allotment is permitted for 2,198 sheep from April 1 to November 1, for 3,107 Animal Unit Months, and for 260 cattle from April 1 to December 15, for 2,214 Animal Unit Months. Far fewer Animal Unit Months have been activated the last several years, and the allotment has been completely rested from cattle grazing for 5 years. In addition, the Jakes Unit Sheep Trail (0821) occurs approximately 2 miles west and south of the southern end of the proposed project area. Two sheep outfits use this part of the trail for one or two days during spring and fall.

#### **3.3.3.2 Impact Analysis**

The Proposed Action would not be expected to have direct or indirect effects to grazing uses or rangeland resources. No loss in permitted Animal Unit Months would occur. The grazing permittee would be notified of the Proposed Action and would be required to trail or graze sheep and cattle in other areas of the allotment during the anticipated 3- to 6-month construction period. In addition, approximately 8.8 acres of temporary construction disturbance would be reclaimed and seeded. The grazing permittee would be required to sign an agreement to rest the seeded areas from grazing for a minimum of two growing seasons.

### **3.3.4 Migratory Birds**

#### **3.3.4.1 Affected Environment**

Migratory birds are defined in 50 CFR 10.12 as any bird, whatever its origin and whether or not raised in captivity, which belongs to a species listed in 50 CFR 10.13 and any bird

that is a mutation or hybrid of any such species. The definition also applies to the nest, egg, or part of any such bird, or any product, whether or not manufactured, that consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. Migratory bird species are protected under the Migratory Bird Treaty Act of 1918. This act prohibits killing or taking migratory bird species without a permit. Protection under the act extends to nesting birds and their eggs.

With the exception of upland game birds such as chukar (*Alectoris chukar*) and introduced species such as European starling (*Sturnus vulgaris*), all bird species commonly found in White Pine County are protected under the Migratory Bird Treaty Act. Avian species diversity and density in the project area peaks during spring and summer months, when migrant species are present. Species diversity decreases markedly during the fall and winter season, when many nesting species move south, out of the project area and White Pine County. Some of the migratory birds likely to nest in the area include American robin (*Turdus migratorius*), Brewer's sparrow (*Spizella breweri*), horned lark (*Eremophila alpestris*), sage sparrow (*Amphispiza belli*), sage thrasher (*Oreoscoptes montanus*), western meadowlark (*Sturnella neglecta*), house wren (*Troglodytes aedon*), barn swallow (*Hirundo rustica*), and common raven (*Corvus corax*). Other bird species may utilize the project area in addition those listed above.

#### **3.3.4.2 Impact Analysis**

Migratory bird habitat would be permanently eliminated from approximately 3.3 acres of the project area where the proposed pole structures, substation site, and maintenance road would be located. Surface disturbance during construction may temporarily remove an additional 8.8 acres of habitat. The disturbance would occur adjacent to an existing unpaved road and not result in further fragmentation of habitat. The abundance of similar habitat in the vicinity of the project area would preclude the habitat impacts in the project area from impacting migratory birds.

Direct and indirect impacts to migratory bird individuals or their nests and eggs could occur if the construction period coincides with the migratory bird nesting season (March 1 through August 31 for raptors and April 1 through July 31 for other migratory birds). Equipment could crush nests, eggs, or young birds still unable to take flight and escape approaching construction activities. Construction noise could potentially stress nesting birds and cause them to abandon nests. Mitigation measures listed in Section 3.3.4.3 would prevent direct and indirect construction impacts during the nesting season.

Traditionally, predatory raptor species utilize transmission lines and pole structures as perches when foraging. The proposed project would be constructed between two existing transmission lines that are less than 4 miles apart in the vicinity of the project area. Construction of the proposed project would add additional perching opportunities to those presently provided by the two existing lines. Because the proposed project would

be located between these two lines, raptor foraging habitat would not be expanded to new areas. The new perching opportunities would not be anticipated to support a larger population of raptors beyond that presently supported by the existing lines. Therefore, the proposed transmission line and pole structures would not be anticipated to intensify migratory nest predation. Impacts to migratory birds resulting from raptor predation supported by the Proposed Action would not be expected.

### **3.3.4.3 Mitigation Measures**

If surface disturbance is proposed during the migratory bird nesting season (approximately March 1 to July 31), a nesting migratory bird survey would be performed in areas where surface disturbance is proposed. The survey would be completed by a qualified wildlife biologist within the week prior to commencement of the surface-disturbing activity. If active nests are found, nests would be avoided until the nesting attempt has been completed.

### **3.3.5 Native American Religious and Other Concerns**

#### **3.3.5.1 Affected Environment**

Native American consultation was initiated on February 25, 2011, with an interested party letter that the BLM sent to the Native American tribes listed in Section 5.2. Two of the tribes, the Duckwater Shoshone Tribe and the Paiute Indian Tribe of Utah, have responded to BLM. The Duckwater Shoshone Tribe response was received on March 10, 2011, and included a request for a field visit of the proposed project area. The field visit was performed on March 23, 2011, and attended by BLM personnel, representatives of Mount Wheeler Power, Inc., and Maurice Churchill, representative of the Duckwater Shoshone Tribe. The response from the Paiute Indian Tribe of Utah was received on March 11, 2011, and indicated that there were no known issues regarding the project. No other tribes have responded, but participation opportunities continue to be available. There are no known resources or traditional cultural properties in the project area.

#### **3.3.5.2 Impact Analysis**

Although no specific issues or concerns, or traditional cultural properties were identified by any of the Native American tribes, participation opportunities continue to be available. If previously unknown traditional cultural properties are discovered during construction, the environmental protection measures listed in Section 2.2.5 would be anticipated to prevent impacts to the discovery. Impacts to Native American religious and other concerns would not be expected.

### **3.3.6 Water Quality**

#### **3.3.6.1 Affected Environment**

According to the U.S. Geological Society 7.5 Minute Series Topographic Map (1990), one mapped stream crosses the project area (Figure 4). The stream is mapped as occurring near the northern extent of the proposed project area, very close to the location

where the proposed transmission line would connect to the existing 69 kV transmission line. The stream conveys surface flows west from U.S. Highway 6 downstream toward Giroux Wash. Flows in Giroux Wash are conveyed downstream in a general southerly direction until Preston Reservoir is reached.

A biologist from JBR Environmental Consultants, Inc. verified the stream's location during a site visit in May 2011. There were no surface flows in the stream at the time of the site visit. Accordingly, the stream is likely ephemeral and conveys water only during or after precipitation events or periods of snowmelt. The average width of the stream in the project area is approximately 2 feet (see photograph). The streambed substrate is sand and gravels, and the stream banks are colonized with mature big sagebrush (*Artemisia tridentata* Nutt.). The ephemeral stream likely meets the criteria of a Waters of the U.S. under the Clean Water Act (33 CFR 328), but the jurisdictional status of the stream would need verification by the U.S. Army Corps of Engineers.



### 3.3.6.2 Impact Analysis

Implementation of the Proposed Action would not impact groundwater quality, and the environmental protection measures described in Section 2.2.5 would be anticipated to protect surface water quality. These measures include utilizing best management practices to prevent soil erosion and sedimentation of surface waters. Areas temporarily disturbed during construction would be reclaimed and seeded. As the seeding becomes established the underlying soils would become increasingly stabilized and the potential for erosion would dissipate.

No pole structures would be located in the ephemeral stream, but the proposed maintenance road would cross the stream in a single location. The stream channel bottom would be bladed where the road crosses, and minor grading of the stream channel banks would be required to allow construction vehicles to cross safely. The stream is

## 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

approximately 2-feet wide at the location where it would be crossed by the proposed maintenance road. The proposed maintenance road would be constructed to a width of 10 feet, including at the stream crossing. Therefore, an approximately 2-foot by 10-foot area of surface disturbance would occur within the ephemeral stream as a result of constructing the road crossing (Figure 5). The road crossing would not affect the downstream conveyance of flows within the stream. Alteration of stream flow line or flow pattern would not result from the crossing. No temporary or permanent structures or fill would be located within the stream that would otherwise block or slow flows. Any excess sediment generated from minor grading of the stream banks would be removed from the stream channel and compacted as fill elsewhere on the proposed maintenance road or substation site. Sedimentation of the stream would not occur.

Because Mt. Wheeler Power, Inc. would implement environmental protection measures during construction, reclaim disturbed surfaces after construction, and minimize the area of disturbance required to cross the stream, the anticipated impacts to water quality would be minimal to negligible.

### **3.3.7 Non-Native Invasive and Noxious Species**

#### **3.3.7.1 Affected Environment**

Two separate groups of hoary cress (*Cardaria draba*), a Nevada noxious weed species, occur within the project area. Each group occupies an approximately 30-foot by 30-foot area and is interspersed with native vegetation (Appendix A). Hoary cress is a Category C weed in Nevada (Nevada Department of Agriculture 2009). Category C weeds are defined in Nevada Revised Statutes 555.010 as weeds that are currently established and generally widespread in many counties; the state quarantine officer has discretion for abatement. Cheatgrass (*Bromus tectorum*), an invasive, non-native species, occurs throughout the project area, although population density is generally low.

#### **3.3.7.2 Impact Analysis**

Implementation of the Proposed Action would result in a 12-acre disturbance to native soils and the vegetation cover on those soils. These conditions would increase the risk of colonization by noxious weeds and invasive species. Project construction equipment may inadvertently transport the seeds of noxious weeds and invasive species to areas that would be disturbed during construction. Similarly, vehicles and recreational equipment used by the public on existing roads within the proposed project area may also transport or introduce noxious weeds and invasive species. Hoary cress presently exists within the project area and readily invades disturbed soils.

As part of the analysis of effects to vegetation, a noxious weed risk assessment was conducted in accordance with the procedure described in Appendix A of BLM Manual 9015 (BLM 1992). The procedure is designed with the intent of determining a risk rating for a project site that is the product of two risk assessment factors that are to be

determined per a series of characteristics that have been assigned to the possible numerical rating values. The risk rating is used to identify the required guidelines for control and management of noxious and invasive weed species in the project area. The risk value for the proposed project was determined to be 10, which correlates to a low risk rating. For a low risk rating, BLM recommends proceeding with the Project as planned, with initiation of control treatments for noxious weeds that become established in the project area (BLM 1992). A detailed analysis of the noxious weed risk assessment is provided in Appendix B of the EA.

Mt. Wheeler Power, Inc. would implement control measures should any noxious weeds become established in the project area. Control measures would be implemented in accordance with existing regulations and BLM requirements. Control measures would be based on species-specific and seasonal conditions and will be coordinated with the BLM Project Manager. Chemical and/or mechanical control measures may be implemented as needed and determined in concurrence with the BLM Project Management. Pesticides approved for use on the Project site will be reviewed and approved by the BLM prior to initiation of their use. Guidelines for the use of chemical control of vegetation on BLM lands are presented in the Chemical Pest Control Manual. These guidelines require submittal of a Pesticide Use Proposal which will be prepared by the Contractor and submitted to the BLM for review and approval prior to initiation of construction activities. Once approved any use of pesticides will require Pesticide Application Records that detail the use and application. The Pesticide Application Records will then be submitted to the BLM in a timely manner.

Reclamation of disturbed areas would minimize the potential for the establishment of noxious weeds and spread of invasive species after project construction. Reclamation would include seeding disturbed areas with a certified weed-free seed mix. Mt. Wheeler Power, Inc. would also utilize certified weed-free material during construction, such as weed-free hay bales, should hay bales be used for erosion control.

With seeding of disturbed areas during reclamation and implementation of control measures to prevent noxious weeds from becoming established within the project area, impacts from noxious weeds and invasive, non-native species would be negligible to non-occurring.

### **3.3.8 Special Status Species**

#### **3.3.8.1 Affected Environment**

Special Status Species include plant and wildlife species that are listed or proposed for listing under the Endangered Species Act as threatened or endangered, candidate species for such listing, and species included on the Nevada BLM's sensitive species list.

The BLM Manual 6840 (2008c) states that species designated as BLM sensitive must be native species found on BLM-administered lands for which the BLM has the capability to significantly affect the conservation status of the species through management. Further, either or both of the following conditions must be must be applicable for a species to be designated BLM sensitive:

- There is information that a species has recently undergone, is undergoing, or is predicted to undergo a downward trend such that the viability of the species or a distinct population segment of the species is at risk across all or a significant portion of the species range; or
- The species depends on ecological refugia or specialized or unique habitats on BLM-administered lands, and there is evidence that such areas are threatened with alteration so as the continued viability of the species in that area would be at risk.

BLM sensitive species are provided the same level of protection as federal candidate species by the BLM. The BLM policy for sensitive species is to avoid authorizing actions that would contribute to listing a species as threatened or endangered.

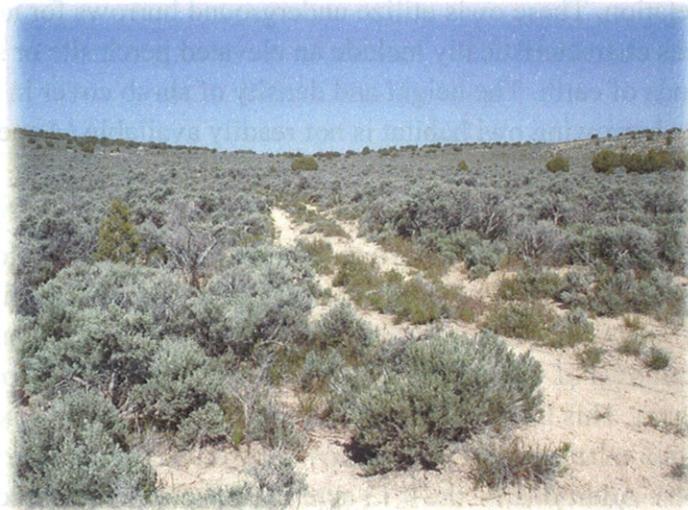
The U.S. Fish and Wildlife Service, Nevada Department of Wildlife, and Nevada Natural Heritage Program were consulted for records of special status species within the project area and vicinity. Consultation letters from each agency are included in Appendix C. A biologist from JBR Environmental Consultants, Inc. performed a survey of the project area on May 26, 2011, for various plant and animal species, including the special status species listed in the agency response letters. A Biological Report prepared by JBR Environmental Consultants, Inc., is included in Appendix A and summarizes the methodology and findings of the survey.

The Nevada Natural Heritage Program indicated that habitat for White River catseye (*Cryptantha welshii*) may occur within the project area. White River catseye is a BLM sensitive species found on dry, open, sparsely vegetated outcrops and derived sandy to silty or clay soils of whitish calcareous or carbonate deposits. The plant is also found on soils adjacent to these habitats, mostly in juniper, sagebrush, and rabbitbrush (*Chrysothamnus* spp.) cover (Nevada Natural Heritage Program 2001). White River catseye was not observed in the project area during the survey on May 26, 2011. Prickly pear cactus (*Opuntia* spp.) individuals were observed in isolated locations throughout the proposed project area. Removal or destruction of cactus for commercial purposes is regulated under Nevada Revised Statutes 527.060 through 527.120 and Nevada Administrative Code, Chapter 527. Written permission must be provided by the BLM for such removal or destruction occurring on land the agency administers.

### 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

The U.S. Fish and Wildlife Service indicated that there are no records of federally listed or proposed listed species known to occur within the proposed project area. The agency indicated that greater sage-grouse (*Centrocercus urophasianus*), a candidate species, may occur within the project area. Consultation with the Nevada Department of Wildlife supported the possibility of sage-grouse potentially occurring within the project area. The agency indicated that sage-grouse winter distribution habitat intersects the southeastern corner of the project area, and summer distribution, nesting, and core breeding habitat exists within 3 miles (Appendix C). According to the Nevada Department of Wildlife there are no known greater sage-grouse leks in the vicinity of the project area.

Greater sage-grouse are dependent on sagebrush habitat and during winter months are totally dependent on sagebrush for food and cover (Beck 1977). The species cannot survive in areas where sagebrush does not exist (U.S. Fish and Wildlife Service 2011). Mixed sagebrush shrubland is the predominant vegetation cover within the project area. The value it provides as sage-grouse habitat is somewhat diminished. Utah juniper trees have invaded the sagebrush shrubland in the northern portion of the project area and replaced sagebrush that once presumably occurred there. There are numerous existing roads in the area that have fragmented sage-grouse habitat, including habitat within the project area (see photo). Sage-grouse populations are known to become stressed when large areas of habitat are fragmented (Beck 1977). Noise associated with vehicle travel, particularly on nearby U.S. Highway 6, would also likely devalue the sage-grouse habitat within the project area. Evidence of sage-grouse within the project area was not observed during a survey performed by JBR Environmental Consultants, Inc. in May 2011. A survey was also performed for pygmy rabbit (*Brachylagus idahoensis*), another BLM sensitive species dependent on sagebrush. No evidence of pygmy rabbits was observed during the survey. The lack of evidence during the surveys, combined with the fragmented conditions of the sagebrush habitat, suggests that neither species is likely to routinely occur within the project area.



### 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

The Nevada Department of Wildlife indicated that various raptor species are known to reside in the vicinity of the proposed project area. These species include American kestrel (*Falco sparverius*), barn owl (*Tyto alba*), burrowing owl (*Athene cunicularia*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), great horned owl (*Bubo virginianus*), long-eared owl (*Asio otus*), merlin (*Falco columbarius*), northern goshawk (*Accipiter gentilis*), northern harrier (*Circus cyaneus*), northern saw-whet owl (*Aegolius acadicus*), osprey (*Pandion haliaetus*), peregrine falcon (*Falco peregrinus*), prairie falcon (*Falco mexicanus*), red-tailed hawk (*Buteo jamaicensis*), rough-legged hawk (*Buteo lagopus*), sharp-shinned hawk (*Accipiter striatus*), short-eared owl (*Asio flammeus*), Swainson's hawk (*Buteo swainsoni*), and turkey vulture (*Cathartes aura*). Furthermore, the Nevada Department of Wildlife indicates that bald eagle (*Haliaeetus leucocephalus*) and golden eagle have been directly observed in the vicinity of the project area. Raptor species are protected by state and federal laws. In addition, burrowing owl, ferruginous hawk, northern goshawk, peregrine falcon, short-eared owl, and Swainson's hawk are Nevada Department of Wildlife species of special concern and are target species for conservation as outlined by the Nevada Wildlife Action Plan. The Nevada Department of Wildlife has indicated that there are no known raptor nest sites in the vicinity of the project area, but a golden eagle nest occurs within 10 miles of the project area.

During the May 2011 survey, the project area was examined for raptors and evidence of nesting activity. While no nests were observed, the biologist observed suitable foraging habitat for many of the raptor species. Raptor nesting habitat within the project area was generally absent with the exception of loggerhead shrike (*Lanius ludovicianus*) nesting habitat (Appendix A). Loggerhead shrike prefers shrubs, such as sagebrush, for nesting.

During the survey, the project area was also examined for burrowing owls, a migratory bird and a designated BLM sensitive species. Burrowing owls generally inhabit open areas with low vegetation. These owls utilize underground burrows for nesting and shelter. Nesting areas characteristically include an elevated perch site or sites, such as fence posts or mounds of earth. The height and density of shrub cover in the project area suggest that suitable burrowing owl habitat is not readily available (Appendix A).

#### **3.3.8.2 Impact Analysis**

Approximately 0.13 acre of sage-grouse winter distribution habitat would be impacted by construction and operation of the proposed project. The 0.13 acre of habitat occurs along the western edge of the overall, larger area of mapped winter distribution habitat. Impacts would include the removal of vegetation, which would eliminate sage-grouse habitat from the impacted area. This habitat loss would be minor because approximately 50 percent of the vegetation has already been removed by roads that crisscross the area (see previous photograph). Additionally, the 0.13 acre of impacted habitat occurs along the

western edge of the overall, larger area of mapped winter distribution habitat (Figure 6). Therefore, impacts within larger, contiguous areas of winter distribution habitat would be avoided.

Disturbance within the project area that would occur outside of the mapped winter distribution habitat would impact sagebrush scrub cover that represents potential sage-grouse habitat. The Proposed Action would be expected to have minimal to negligible impacts on sage-grouse due to the fragmented condition of the sagebrush habitat within the project area and the lack of evidence of the species during the May 2011 survey.

Noise generated by construction equipment may displace individuals temporarily for the 3- to 6-month construction period if construction occurs during winter months. The presence of existing roads would be anticipated to dampen the impact of noise, however, due to the routine traffic noise generated on U.S. Highway 6 primarily. The lack of evidence of sage-grouse within the project area during the field survey, combined with the reduced quality of the habitat, would make impacts to sage-grouse unlikely.

Implementation of the Proposed Action would impact approximately 12 acres of foraging habitat for raptor species. Approximately 8.8 acres of the disturbance would be temporary for construction and reclaimed afterward. The remaining 3.3 acres would be permanent losses of habitat and occur where the proposed maintenance road, transmission line pole structures, and substation site are constructed. Nesting habitat is absent from the proposed project area for most raptor species, including eagles, falcons, and hawks, but limited nesting habitat for loggerhead shrike is present. However, this habitat is less than ideal given its proximity to human disturbance and proximity to better habitat nearby. The abundance of surrounding foraging habitat and presence of higher quality nesting habitat nearby would lessen the intensity of the impacts of the proposed project. Impacts would be minimal.

The proposed transmission line and pole structures would provide perching and nesting opportunities for raptor species, including special status raptor species. With wide wingspans and aggressive flight patterns, raptors utilizing the transmission lines and pole structures may contact two or more components of the electrical system and complete an electrical circuit. Electrocution would occur when a raptor completes a circuit, and the bird would certainly experience injury or mortality, which would be a negative impact. The negative impact would outweigh the benefits of the new perching and nesting opportunities the project would provide. Implementation of the mitigation measures listed in Section 3.3.8.3 would greatly reduce the potential for raptor electrocution and would prevent impacts to special status raptors.

### 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

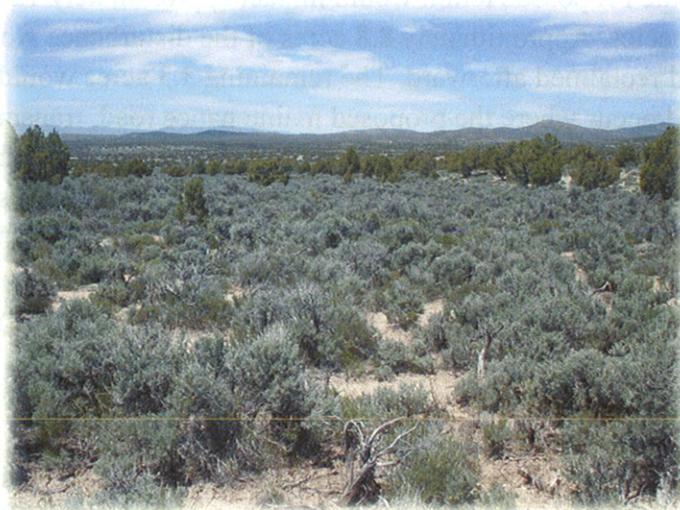
### 3.3.8.3 Mitigation Measures

The proposed pole structures would be constructed to the specifications and dimensions recommended by the Avian Power Line Interaction Committee in the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (2006). These specifications and dimensions are based on providing spacing between the various components of pole structures and conductors wires so as to accommodate a large eagle.

### 3.3.9 Fish and Wildlife

#### 3.3.9.1 Affected Environment

Wildlife habitat in the project area consists of a xeric mixed sagebrush shrubland (see photo), with the exception of drainages, where mature sagebrush is the dominant cover. The xeric mixed sagebrush cover includes scattered Utah juniper trees but is dominated by shrub species that include black sagebrush (*Artemisia nova*), rabbitbrush, shadscale saltbush (*Atriplex confertifolia*), and winterfat (*Krascheninnikovia lanata*). Common forbs and grasses include bluebunch wheatgrass (*Pseudoroegneria spicata*), needle and thread grass (*Stipa comata*), phlox (*Phlox* spp.), and astragalus (*Astragalus* spp.).



The Nevada Department of Wildlife indicated the entire project area is within occupied elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*) distributions (Appendix C). Antelope scat and tracks were observed throughout the project area during a survey performed by JBR Environmental Consultants, Inc. in May 2011. While evidence of mule deer and elk were not observed, the project area provides suitable habitat for both species and both would be likely to occur within the area. Because the project area is a relatively narrow corridor located adjacent to U.S. Highway 6, large mammals would likely occur only as transient species passing through the area to reach larger contiguous tracts of habitat further from the road.

Additional wildlife that would be expected to occur within the habitat found in the project area includes various species of reptiles, birds, and small mammals. Expected reptilian species would include side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), and Great Basin gophersnake (*Pituophis catenifer*). Many species of birds would be supported by this habitat. Some of the species likely to occur include mountain bluebird (*Sialia currucoides*), sage thrasher, scrub jay (*Aphelocoma californica*), western meadowlark, American robin, mourning dove (*Zenaida macroura*), and the common raven. Some small mammals typical of the habitat occurring within the project area include American deer mouse (*Peromyscus maniculatus*), desert cottontail rabbit (*Sylvilagus audubonii*), and black-tailed jackrabbit (*Lepus californicus*). Some medium-sized mammals typical of the habitat occurring within the project area include bobcat (*Lynx rufus*) and coyote (*Canis latrans*). The project area is a relatively narrow corridor, and many of these species would occur only during movement across the project area. Fish habitat does not exist within the proposed project area.

### **3.3.9.2 Impact Analysis**

No wildlife individuals or groups of individuals would be expected to be injured or killed as a result of implementation of the Proposed Action. Construction would progress in a generally linear path along the overhead transmission line alignment. If wildlife were to occur in the alignment, it is expected that most wildlife would vacate the area prior to construction equipment reaching their location. However, some individuals may take refuge in burrows or hide beneath vegetation or cover within the project area. The wildlife individuals may remain in burrows or in hiding until escape or fleeing is no longer viable and may be crushed by equipment, resulting in the animal being killed. Because most wildlife would be expected to vacate the project area prior to equipment reaching their location, any mortality would be expected to be minimal.

The proposed project would be constructed between two existing transmission lines that are less than 4 miles apart in the vicinity of the project area. Construction of the proposed project would add additional perching opportunities to those presently provided by the two existing lines. Raptors may forage on small mammals and reptiles from these perch sites. However, because the proposed project would be located between the two existing lines, prey species in the area are presently at risk of overhead raptor predation. Raptor foraging habitat would not be expanded to new areas by the project, nor would the new perching opportunities be anticipated to support a larger population of raptors. Therefore, the proposed transmission line and pole structures would not be anticipated to intensify predation of small mammals and reptiles. Additionally, very little wildlife was observed within the area during a survey performed by JBR Environmental Consultants, Inc. in May 2011. Impacts to wildlife resulting from raptor predation supported by the Proposed Action would not be expected.

As discussed in Section 3.3.8.2, birds that utilize the proposed transmission line and pole structures for perching or nesting may experience electrocution. This would be especially applicable for raptors or other large birds with wide wing-spans that would be more likely to contact two more components of the electrical system and complete an electrical circuit. Mitigation measures listed in Section 3.3.8.3 would greatly reduce the potential for avian electrocution and would ensure impacts to birds remain minimal to negligible.

Impacts to wildlife habitat are anticipated to be minimal and generally short term. Most species would likely utilize habitat in the project area for foraging rather than nesting due to its proximity to U.S. Highway 6. Approximately 12 acres of habitat would be removed during construction of the proposed project. Approximately 8.8 acres of the habitat removed during construction would be short term and temporary for the duration of construction and establishment of vegetation following reclamation. The remaining 3.3 acres of wildlife habitat impacts represent permanent disturbance associated with construction of the maintenance road, substation site, and pole structures. Permanent loss of habitat areas of this size is negligible when the abundance of similar habitat surrounding the project area is considered. Therefore impacts to wildlife would be minimal to non-existent. There would be no impact to fish habitat because the proposed project area does not contain any aquatic habitat or open water areas.

### **3.3.10 Soils**

#### **3.3.10.1 Affected Environment**

Soil associations in the project area were mapped and defined by the Natural Resources Conservation Service in the Soil Survey of Western White Pine County Area, Nevada, Parts of White Pine and Eureka Counties (Natural Resources Conservation Service 1998). A soil association consists of two or more soil series with similar characteristics that regularly occur together in the landscape (Hendricks 1985). As shown on Figure 7, the soil associations that occur within the project area include:

- the Zimbob-Pookaloo association;
- the Palinor-Shabliss association; and,
- the Biken association.

The following major soil series comprise the soil associations in the project area.

#### *Biken Series*

The Biken series consists of very gravelly fine sandy loam soils that formed in mixed alluvium over weathered tuff and tuffaceous sandstone. The soils are well drained and shallow, and found on hills and fan piedmont remnants that have a rock core. Slopes range from 2 percent to 30 percent. There is a slight potential for water or wind to erode these soils. The mean annual precipitation is about 10 inches, and the mean annual air temperature is about 47 degrees Fahrenheit.

*Pookaloo Series*

The Pookaloo series consists of very gravelly loam and silt loam soils that formed in residuum and colluvium derived from limestone and dolomite. The soils are well drained and shallow, and are found on hills and the side slopes of mountains. Slopes range from 8 percent to 75 percent. The potential for water or wind to erode these soils is slight. The mean annual precipitation is about 13 inches, and the mean annual air temperature is about 46 degrees Fahrenheit.

*Zimbob Series*

The Zimbob series consists of very gravelly loam soils that formed in limestone- and dolomite-derived residuum and colluviums. The soils are well drained, very shallow or shallow, and found on the side slopes of hills and mountains. Slopes are between 4 percent and 75 percent. The erosion potential for these soils from water and wind is slight. The mean annual precipitation is about 12 inches, and the mean annual air temperature is about 45 degrees Fahrenheit.

*Palinor Series*

The Palinor series consists of gravelly to extremely gravelly loam soils that formed in alluvium derived from limestone and dolomite. The soils are well drained and shallow over a lower duripan. They are found on fan piedmonts where slopes are 2 percent to 50 percent. The erosion potential for these soils from water and wind is slight. The mean annual precipitation is about 10 inches, and the mean annual air temperature is about 47 degrees Fahrenheit.

*Shabliss Series*

The Shabliss series consists of gravelly loam soils that formed in mixed alluvium with a thin mantle of loess high in volcanic ash content. The soils are shallow over a duripan and are well drained. They are found on fan piedmont remnants with slopes ranging from 0 percent to 15 percent. The potential for water or wind to erode these soils is slight. The mean annual precipitation is about 10 inches, and the mean annual air temperature is about 48 degrees Fahrenheit.

**3.3.10.2 Impact Analysis**

Surface disturbance resulting during construction of the proposed project would remove vegetation cover and expose underlying soils. Topsoil and underlying shallow layers of the soil would be moved and potentially mixed, and project equipment would compact soils where repeated travel occurs. The potential for soil erosion would increase once vegetation is removed and natural soil structure is compromised, particularly on slopes where the proposed 35 kV transmission line is aligned east-west. Best management practices to reduce soil erosion and sedimentation would be implemented during construction and operation of the Proposed Action. The best management practices and

environmental protection measures ultimately implemented would be dependent on the type of disturbance, soil type, and location of the soil impact relative to other sensitive resources. The disturbances resulting from construction would be temporary during the anticipated 3- to 6-month construction period and the period required for reclamation seeding to become established. Once established, vegetation in the seeded areas would stabilize underlying soils and reduce the potential for erosion.

Approximately 3.3 acres of soils would be buried and displaced from areas where the proposed pole structures, substation site, and maintenance road would be located. This would be a permanent impact to soils. Additionally, some topsoil would be permanently displaced and lost from mechanical disturbances and from wind erosion, until reclamation vegetation is established and the soil surface is protected. The relatively small area of permanent impacts to soils, combined with the protection and reclamation measures to reduce erosion and soil loss during construction, would result in minimal impacts to soils.

### **3.3.11 Visual Resources**

#### **3.3.11.1 Affected Environment**

The BLM initiated the visual resource management process to manage the quality of landscapes on public land and to evaluate the potential impacts to visual resources resulting from development activities. Areas are assigned a visual resource management class designation that is determined by assessing the scenic value of the landscape, viewer sensitivity to the scenery, and the distance of the viewer to the subject landscape. These management classes identify various permissible levels of landscape alteration while protecting the overall visual quality of the region. The proposed project area is located in a Class III visual resource management area (BLM 2008a). The Class III objective provides for (1) management activities that partially retain the existing character of the landscape and (2) a level of change to the landscape that is moderate. Management activities in a Class III category may attract attention but should not dominate the view of the casual observer. Every attempt should be made to minimize impacts of activities by repeating the basic elements found in the natural features (form, line, color, and texture) of the landscape.

The degree of contrast that a project would be expected to have when introduced into the existing landscape is evaluated using the Contrast Rating System described in BLM Manual 8431 (BLM 1986). The Contrast Rating System provides a systematic way to evaluate a proposed project to determine if it meets visual resource management objectives established by the BLM. To properly assess the contrasts between the existing landscape and alterations that would exist after a proposed project has been added, the Contrast Rating System breaks the landscape down into the basic features (i.e., landform/water, vegetation, and structures) and basic design elements (i.e., form, line, color, and texture). The degree of change among each of the design elements for each

basic landscape feature is assigned a rating of strong, moderate, weak, or no change. For comparative purposes, the four contrast ratings roughly correspond respectively to the four visual resource management class designations (i.e., Class I, II, III, and IV).

The Contrast Rating System was performed at two key observation points located along U.S. Highway 6, south of the project area and north of the project area (Appendix D). Travelers on U.S. Highway 6 constitute the majority of persons that can view the proposed project area. The project area can be viewed from U.S. Highway 6 for 5 to 6 miles. The speed limit on this section of the highway is 55 miles per hour, which gives an approximate viewing time of 6 to 7 minutes. The project area would also be visible to travelers on numerous unpaved roads that cross the project area or cross adjacent or nearby areas. The primary travelers on these roads are recreationists who use the roads to access public land from U.S. Highway 6.

In general, the area surrounding the project area can be described as a typical panoramic Nevada landscape characterized by vast and open spaces and a backdrop of tall jagged mountains. Predominant vegetation in this area consists of scattered low shrubs, including sagebrush, which adds a silvery-greenish hue against the underlying tan-colored soils. Juniper trees, while not dominant, contribute to the vegetation component, particularly in the northern half of the project area. Dominant natural features in both the fore- and middle-ground of the project area consist of low rolling hills. Man's disturbance to the landscape is evident across much of the area visible from the project area and vicinity. U.S. Highway 6 is the prevalent alteration of the natural landscape visible in the foreground. Several other linear disturbances, including unpaved roads and existing overhead transmission lines, are also readily visible. These manmade structures generally intersect flat, open spaces of scattered low shrubs and juniper trees. The Robinson Mine, approximately 8 miles north of the project area, is visible in the background.

#### **3.3.11.2 Impacts Analysis**

Temporary and permanent direct impacts to visual resources would result from implementing the Proposed Action. Temporary impacts would include the removal of vegetation cover during construction, including juniper trees, which are more apparent due to their height above surrounding vegetation. Permanent impacts would consist of alterations to landscape associated with the addition of the proposed transmission lines, pole structures, substation, and maintenance road. These impacts, when combined with the existing roads and transmission lines in the surrounding area, are within the objectives of a Class III visual resource management area. This is based on the relative size of the proposed project, the distance from the key observation points, the proximity to existing roads and transmission lines, and reclamation of temporary disturbances associated with project construction.

The degree of contrast that the Proposed Action would be expected to have on the form, line, color, and texture of the land, vegetation, and structures landscape features would be weak to moderate at key observation points 1 and 2 (Appendix D). The contrast of the line, color, and texture of the three basic landscape features would be weak to moderate at key observation point 1. However, the form of the land, vegetation, and structure features would strongly contrast at key observation point 2 due to the proposed substation site. The line of the vegetation and structures would also strongly contrast at key observation point 2. Implementation of the mitigation measures listed in Section 3.3.11.3 would soften the appearance of the substation site and lessen the degree of contrast between form and line on the landscape features to moderate or less. With mitigation implemented, the Proposed Action would be compliant with the objectives of a Class III visual resource management area. Photographs taken from each of the key observation points and the associated Contrast Rating field sheets are provided in Appendix D.

### **3.3.11.3 Mitigation Measures**

The proposed substation should be located as far west of the highway as feasible. All components of the proposed substation should be painted using the shadow gray paint shade from the BLM Standard Environmental Color Chart, which closely matches the color of shadows found in the surrounding natural landscape.

### **3.3.12 Lands and Realty**

#### **3.3.12.1 Affected Environment**

The Egan Field Office manages public land in east-central Nevada for multiple use and provides opportunities for utility rights-of-ways, mining, wildlife habitat, grazing, and recreation in addition to other resource values and activities. The primary legal basis for granting a ROW on BLM land is Title V, Rights-of-Way, Section 501 of the FLPMA of 1976. FLPMA provides the BLM with authority to grant, issue, or renew rights-of-ways over, upon, under, or through such lands for systems for generation, transmission, and distribution of electric energy, except that the applicant shall also comply with all applicable requirements of the Federal Power Commission under the Federal Power Act of 1935 (49 Statute 847; 16 USC 791). The regulations establishing procedures for the processing of these leases and permits are found in 43 CFR 2800. In addition, the Ely RMP (BLM 2008a) provides guidance for management of public lands in the Ely District and Egan Field Office. The RMP provides for opportunities for multiple land uses in the project area.

Land use demands in the general area of the project are mainly for utility rights-of-ways, roads, extractive industry, grazing, and dispersed recreation. Existing rights-of-ways on BLM land in the general area of the project are listed in Table 4.

**Table 4 Existing BLM Right-of-Ways**

Serial Number	ROW Holder - Description	Location
NVN - 056342	BLM - road	Linear ROW; located approximately 5,000 feet west of project area
NVN - 0061326	Mt. Wheeler Power, Inc. - transmission line	Linear ROW; crosses project area in north-south direction
CC- 018286	Nevada Department of Transportation - road	Linear ROW; located approximately 200 feet east of project area
NVN - 045076	Nevada Department of Transportation - U.S. Highway 6	Linear ROW; located approximately 200 feet east of project area
NVN - 045078	Nevada Department of Transportation - material site	Non-linear ROW; located approximately 8,000 feet south of project area
NVN - 017924	Mt. Wheeler Power, Inc. - transmission line	Linear ROW; proposed project will be an amendment to this existing ROW.

### 3.3.12.2 Impact Analysis

The Proposed Action would be in conformance with the Ely RMP (BLM 2008a). Implementation of the Proposed Action would add an additional transmission line ROW to an area where linear ROWs are common (Table 4). The Proposed Action would not conflict with existing or adjacent land uses, nor would it preempt any of the BLM land use authorizations granted under the existing rights-of-way in the area. The only rights-of-way within the proposed project area are associated with the existing transmission lines that the proposed transmission line would connect to at either end. These rights-of-way are both held by Mt. Wheeler Power, Inc. (Table 4). In addition to these two existing rights-of-way, the only other ROW holders in the surrounding area are the BLM and the Nevada Department of Transportation.

The proposed substation site would be fenced and would restrict public access to approximately 0.4 acre of public land. The remainder of the 12-acre ROW would remain open for public access, and the impact of the closure would be minimal.

### 3.3.13 Recreation

#### 3.3.13.1 Affected Environment

The project area is located adjacent to existing overhead transmission lines, U.S. Highway 6, and several unpaved roads. Unpaved roads in the project area provide access to public land further from the highway and to the existing transmission lines. Dispersed recreation in the area consists of four-wheel driving, dirt bike riding, hunting, hiking, and camping. Off-road vehicle use in the area is limited to existing roads, under the Approved Ely Resource Management Plan (2008a). There are no developed recreation sites within the proposed project. The closest developed recreation site is Ward Mountain Recreation Area, which is 11 miles northeast of the proposed project area. The proposed project is located within the Ely Special Recreation Permit Area (SRPA). The Ely SRPA was

designated thru the Ely District RMP process where competitive motorcycle events will take place. Currently there is one competitive motorcycle event that takes place within the proposed project area every three years. The proposed substation will be located southeast of the competitive motorcycle event course (Figure 8).

### **3.3.13.2 Impact Analysis**

Recreation use within the project area is limited and consists primarily of off-highway vehicle travel on unpaved roads that would not be affected by the Proposed Action. Construction and maintenance of the proposed project would not interfere with dispersed, off-highway vehicle recreational travel. Mitigation measures described in Section 3.3.13.3 would ensure impacts to the competitive motorcycle event course are avoided.

### **3.3.13.3 Mitigation Measures**

Mt. Wheeler Power, Inc. would contact BLM at the beginning of each calendar year that project construction is ongoing to determine the dates of any special recreation permits authorized within the project area. Mt. Wheeler Power, Inc. would not perform construction on the day of authorized events and would coordinate with BLM regarding acceptable construction periods during event preparation activities prior to the start of any scheduled events.

## **3.3.14 Vegetation**

### **3.3.14.1 Affected Environment**

JBR Environmental Consultants, Inc., performed a botanical survey within the project area on May 26, 2011. The botanical survey included walking on foot through the entire project area mapping the existing vegetation communities and recording every vegetation species that was encountered. Field observations during the May 2011 survey revealed the vegetation cover within the project area consists primarily of xeric shrub species. Dominant shrub species included black sagebrush, big sagebrush, Wyoming big sagebrush (*Artemisia tridentata* spp. *wyomingensis*), yellow rabbitbrush (*Chrysothamnus viscidiflorus*), shadscale saltbush, Mormon tea (*Ephedra viridis*), and winterfat. The herbaceous component was sparse and commonly observed species included needle and thread grass, bluebunch wheatgrass, phlox, and astragalus. Washes and drainages in the project area were often dominated almost entirely with mature big sagebrush, lacking the other shrub and herbaceous species that were commonly observed elsewhere in the project area (see photo).



Vegetation cover in the northern half of the project area also included a coniferous tree component consisting of scattered Utah juniper trees. A total of approximately 187 individual trees were inventoried during the May 2011 survey. Pinyon pine (*Pinus monophylla*) and Utah juniper commonly occur as associate species. Although pinyon pine was not observed during the May 2011 survey, the species may occur within or near the project area.

A complete list of the species observed during the May 2011 survey is provided in Table 5. A detailed account of the survey methodology and results is described in the biological report prepared by JBR Environmental Consultants, Inc., titled: *Biological Survey Results: Mt. Wheeler Power, Inc.: Pescio Substation Project: White Pine County, Nevada* (2011). A copy of the report is provided in Appendix A.

**Table 5 - May 2011 Botanical Survey Species List**

Common Name	Scientific Name
<b>Trees</b>	
Utah Juniper	<i>Juniperus osteosperma</i>
<b>Shrubs</b>	
Black sagebrush	<i>Artemisia nova</i>
Big sagebrush	<i>Artemisia tridentata</i>
Mountain big sagebrush	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i>
Wyoming big sagebrush	<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i>
Shadscale saltbush	<i>Atriplex confertifolia</i>
Yellow rabbitbrush	<i>Chrysothamnus viscidiflorus</i>
Mormon tea	<i>Ephedra viridis</i>
Winterfat	<i>Krascheninnikovia lanata</i>

Common Name	Scientific Name
<b>Forbs</b>	
Fragrant white sand verbena	<i>Abronia elliptica</i>
Alyssum	<i>Alyssum</i> sp.
Rockcress	<i>Arabis</i> sp.
Ground-crescent milkvetch	<i>Astragalus chamaemeniscus</i>
Newberry's milkvetch	<i>Astragalus newberryi</i>
Fourwing milkvetch	<i>Astragalus tetrapterus</i>
Whitetop	<i>Cardaria draba</i>
Crossflower	<i>Chorispora tenella</i>
Douglas' dustymaiden	<i>Chaenactis douglasii</i>
Indian paintbrush	<i>Castilleja</i>
Wrinkled cryptantha	<i>Cryptantha rugulosa</i>
Anderson's larkspur	<i>Delphinium andersonii</i>
Western tansymustard	<i>Descurainia pinnata</i>
Cushion buckwheat	<i>Eriogonum ovalifolium</i>
Gilia	<i>Gilia</i> sp.
Evening primrose	<i>Oenothera</i> sp.
Royal penstemon	<i>Penstemon speciosus</i>
Longleaf phlox	<i>Phlox longifolia</i>
Chambers' twinpod	<i>Physaria chambersii</i>
Hornseed buttercup	<i>Ranunculus testiculatus</i>
Flaxleaf plainsmustard	<i>Schoenocrambe linifolia</i>
Globemallow	<i>Sphaeralcea</i>
Prince's plume	<i>Stanleya pinnata</i>
Stemless mock goldenweed	<i>Stenotus acaulis</i>
Heartleaf jewelflower	<i>Streptanthus cordatus</i>
<b>Graminoids</b>	
Indian ricegrass	<i>Achnatherum hymenoides</i>
Cheatgrass	<i>Bromus tectorum</i>
Needle and thread grass	<i>Hesperostipa comata</i>
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>
<b>Cactus</b>	
Prickly pear	<i>Opuntia</i> sp.

**Table 5 Notes:**

- Data is table provided in: *Biological Survey Results: Mt. Wheeler Power, Inc.: Pescio Substation Project: White Pine County, Nevada* (JBR 2011).

### 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

### **3.3.14.2 Impact Analysis**

Implementation of the Proposed Action would result in up to approximately 12 acres of vegetation disturbance. Approximately 8.8 acres of the disturbance would consist of vegetation cover removed during construction activities. These areas would be reclaimed and seeded with the seed mix provided in Table 2. The other 3.3 acres of vegetation disturbance would consist of permanent impacts. Permanent loss of vegetation would occur at the proposed pole structures, substation site, and maintenance road. Although these areas would be reclaimed and seeded following decommission of the project, impacts would be considered permanent due to the relatively lengthy duration of the impact (30 years).

There are approximately 187 individual Utah juniper trees scattered throughout the northern half of the project area. These trees would be permanently cleared from the proposed project area during construction. Trees reaching heights much greater than surrounding vegetation would routinely be cleared from within the project area during maintenance activities. Cleared trees would be removed from the project area or chipped to mulch and left within the project area. Future maintenance or repair of the proposed transmission lines or substation would also require minimal surface disturbance in areas of reclaimed vegetation. Any disturbance would be reclaimed by Mt. Wheeler Power, Inc., following maintenance or repair activities.

The impacts to vegetation would be expected to be minimal since native vegetation is expected to recover following reclamation.

## **3.4 RESOURCES/CONCERNS ANALYZED - ALTERNATIVES**

### **3.4.1 No Action Alternative**

Under the No Action alternative, the proposed project would not be constructed and Mt. Wheeler Power, Inc. would not perform any activities within the proposed project area. This alternative would not result in impacts to any of the resources discussed above. The existing conditions for each resource described above would remain unaltered under the No Action alternative.

## **4.0 CUMULATIVE IMPACTS**

### **4.1 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 impacts of the Proposed Action. 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 CFR 1508.7).

Resources considered in this cumulative impact assessment are limited to resources impacted by the Proposed Action. The Proposed Action would contribute up to 12 acres of temporary and permanent surface disturbance and would add long-term features (pole structures, maintenance road, and the substation) to the landscape. As described in Chapter 3, the Proposed Action would have minor impacts on vegetation, wildlife and migratory bird habitat, special status wildlife species, cultural resources, visual resources, and soils resources after BLM-recommended mitigation measures are implemented.

The area from which potential cumulative projects were drawn is referred to as the cumulative impacts assessment area and includes a 1-mile area surrounding all sides of the proposed project area (Figure 9). The Proposed Action would not affect any of the resources identified above beyond this analysis area. There are approximately 5,175 acres contained within the limits of the cumulative impacts assessment area.

The period of time for the cumulative analysis is 30 years because the proposed project would provide electrical service for that length of time. The majority of effects from the proposed project would occur during the construction period, which is anticipated to last 3 to 6 months. Effects to visual resources would be anticipated for the entire cumulative analysis period. Maintenance and repair of the proposed project would be on-going as needed during the cumulative time frame but would be anticipated to occur infrequently.

### **4.2 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS**

There are very few past actions within or near the cumulative impact assessment area. The construction of approximately 215,910 linear feet of roads and approximately 33,255 linear feet of transmission line are the only past actions within the area that have affected the resources that the Proposed Action would have a cumulative impact on (Table 6). Approximately 81 acres of surface disturbance resulted from past road and transmission line construction. Several roads, including U.S. Highway 6, are constructed within authorized ROWs, but many of the roads in the cumulative impact assessment area were constructed on BLM-administered land without a ROW authorization.

Present actions within the cumulative impacts assessment area that would impact resources impacted by the Proposed Action are limited to utilization of the roads and operation of transmission lines that were constructed as past actions (Table 6). The presence and use of the roads and transmission lines continue to displace native vegetation, habitat, and soils. This continued displacement is essentially the long-term impact of past actions on these resources.

There are no large planned future projects within the cumulative assessment study area. Continued use of existing roads and operation of transmission lines would be expected to continue into the reasonably foreseeable future and to continue to impact the same resources as present actions (Table 6).

**Table 6 Past, Present, and Reasonably Foreseeable Future Actions**

<b>Actions/ Interrelated Projects</b>	<b>Impacted Resource(s): Soils, Vegetation, Noxious Weeds and Invasive, Non-Native Species, Cultural Resources, and Wildlife Habitat, Including Migratory Birds and Special Status Wildlife Species Habitat</b>	<b>Impacted Resource(s): Visual Resources</b>
<b>Past Actions</b>		
Construction of approximately 215,910 linear feet (40.9 miles) of roads	Approximately 65.75 acres of surface disturbance resulted from past road construction. This surface disturbance altered native soils and removed vegetation and wildlife habitat. It is unknown whether, or how, cultural resources may have been potentially impacted by past road construction.	Construction of roads has added linear contrast to land and vegetation elements of natural landscape. U.S. Highway 6 is the most visibly apparent road in the area.
Construction of approximately 33,255 linear feet (6.3 miles) of overhead transmission line corridors	Approximately 15.25 acres of surface disturbance and 6.3 miles of raptor perching habitat resulted from construction of transmission lines. The surface disturbance would have similar effect to soils, vegetation, and wildlife habitat as past road construction. It is unknown whether, or how, cultural resources may have been potentially impacted by past road construction.	Construction of overhead transmission lines has added linear contrast to land and vegetation elements of natural landscape. The transmission line poles have added moderate contrast to the structure element of the landscape.
<b>Present Actions</b>		
Continued use and operation of roads and transmission lines	Approximately 81 acres of soils, vegetation, and wildlife habitat lost or disturbed by past actions continue to be lost or disturbed.	Roads and overhead transmission lines continue to add contrast to the land, vegetation, and structure components of the visual landscape.

#### 4.0 CUMULATIVE IMPACTS

Actions/ Interrelated Projects	<b>Impacted Resource(s): Soils, Vegetation, Noxious Weeds and Invasive, Non-Native Species, Cultural Resources, and Wildlife Habitat, Including Migratory Birds and Special Status Wildlife Species Habitat</b>	<b>Impacted Resource(s): Visual Resources</b>
<b>Reasonably Foreseeable Future Actions</b>		
Continued use and operation of roads and transmission lines	Approximately 81 acres of soils, vegetation, and wildlife would continue to be removed or altered from existing roads and transmission lines.	Roads and overhead transmission lines would continue to add contrast to the land, vegetation, and structural components of the visual landscape.

### 4.3 CUMULATIVE IMPACT ANALYSIS

#### Vegetation and Wildlife Habitat

The Proposed Action would add 12 acres of vegetation and wildlife habitat disturbance to 81 acres of existing disturbance from cumulative actions. Cumulative impacts of the Proposed Action would be minor because 8.8 acres of vegetation would be reclaimed after disturbance, restoring vegetation and wildlife habitat. The severity of the Proposed Action's impact on wildlife habitat is further reduced because of the proximity of the project area to existing roads and other transmission lines (see Section 3.3.9).

#### Noxious Weeds and Invasive, Non-Native Species

Past road construction has increased the vehicle accessibility to parts of the project area and much of the surrounding vicinity. Vehicles are a common transporter of seeds or other plant materials, including seeds of noxious weed species or other invasive, non-native species. Consequently, past actions have increased the potential for infestation of noxious weeds and invasive, non-native species within the cumulative impact assessment area. Past action as well as present actions, especially continued use of existing roads, has likely led to infestations in isolated locations of the assessment area.

The Proposed Action would add an additional 12 acres of surface disturbance to the 81 acres of existing disturbance that has resulted from the other cumulative actions in the assessment area. Much of the surface disturbance would be located near existing roads that would be open for public use, vehicular or otherwise. The surface disturbance would be particularly susceptible to establishment by noxious weeds due to the absence of vegetation cover and recently disturbed soils. However, Mt. Wheeler Power Inc., would reclaim the areas disturbed by the proposed project, which included seeding the area with a certified, weed-free seed mix. Mt. Wheeler Power would also implement control measures in the event that noxious weeds become established within the project area. The control measures that would be implemented would be determined in coordination with the BLM. These measures would prevent the Proposed Action from having any cumulative impact related to noxious weeds and invasive, non-native species.

## 4.0 CUMULATIVE IMPACTS

### Special Status Species

The Proposed Action would impact approximately 0.13 acre of sage-grouse winter distribution habitat. The cumulative impact of the Proposed Action would be minor because approximately 50 percent of the 0.13 acre of sage-grouse winter habitat that would be impacted was previously converted to roads as a past action. Past road construction has also fragmented the winter habitat. The proposed project would be constructed at the western edge of the mapped winter distribution habitat and would not contribute to cumulative impacts associated with habitat fragmentation (see Section 3.3.8).

### Soils

Surface disturbance related to the Proposed Action would result in the removal of vegetation cover and the loosening and exposure of soils, which would increase the potential for erosion. The potential erosion associated with the Proposed Action, in combination with past actions, could add incrementally to total soil loss from erosion. The cumulative impact of the Proposed Action would be minimal because the 3- to 6-month construction period would be relatively short, and several best management practices and project components would reduce and prevent soil loss during and after construction.

During construction, Mt. Wheeler Power, Inc. would implement best management practices to reduce and prevent potential soil erosion (see Section 3.3.10). Best management practices would include installing erosion control measures, such as silt fencing, diversion ditches, water bars, or mulching, if trees are chipped at the project area. Wind erosion would be reduced by utilizing a water truck to moisten construction soils and by operating equipment at prudent speeds of 25 miles per hour or less.

Most surface disturbance would be temporary during the 3- to 6-month construction period and would be reclaimed afterwards. Reclamation would include seeding the area to restore vegetation cover. Once established vegetation cover would stabilize soils and prevent erosion. Silt fencing, water bars, or other erosion control measures implemented during construction may be left in place, or may be temporary installed until vegetation cover is established if necessary to reduce erosion. Areas not subject to reclamation include the proposed maintenance road and substation site. Gravel would be applied to the entire proposed substation site and may be applied to specific segments of the proposed maintenance road as needed. Where applied, gravel would cover underlying soils and prevent erosion for the life of the project. Water bars, combined with relatively flat topography, would reduce the potential for erosion where gravel is not applied to the proposed road.

### Visual Resources

The Proposed Action would add 2.6 miles of transmission line, pole structures, and maintenance road to 6.3 miles of existing transmission lines in the cumulative impacts assessment area. The cumulative impact of the addition of these project components would be minor because they would occur parallel or adjacent to existing transmission lines and roads similar in appearance. The Proposed Action would also add a substation site to landscape visible from parts of the cumulative impacts assessment area. Mitigation measures listed in Section 3.3.11.3 would lessen its visual contrast in the landscape, and the cumulative impact would be moderate.

### Cultural Resources

It is unknown whether other cumulative actions impacted cultural resources or whether any ever occurred or remain other than those identified in Section 3.3.2. The Proposed Action would have only a minimal impact to cultural resources with mitigation measures implemented (see Section 3.3.2) and would not result in the loss of a cultural resource. Because impacts would be minimal and no loss of the resource would occur, the cumulative impact of the Proposed Action would be minimal.

## **4.4 ALTERNATIVES**

### **4.4.1 No Action Alternative**

The No Action alternative would not result in impacts to any of the resources discussed in Chapter 3. 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.” Therefore, by definition, the No Action Alternative would not have any cumulative impacts on any resource.

## 5.0 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

### 5.1 INTRODUCTION

The issue identification section of Chapter 3 provides the rationale for issues that were considered but not analyzed further and identifies those issues analyzed in detail in Chapter 3. The following sections of this chapter provide disclosure of the persons, groups, or agencies consulted to develop those issues or to gain more understanding of the potential impacts of the Proposed Action on an issue.

### 5.2 PERSONS, GROUPS, AND AGENCIES CONSULTED

The issues identified in Table 3 and discussed in Chapter 3 were partially developed in consultation with the persons, groups, and agencies listed in Table 7.

**Table 7 Persons, Groups, and Agencies Consulted**

Name	Purpose & Authority for Consultation or Coordination	Findings and Conclusions
Steve Abele	U.S. Fish and Wildlife Service	Mr. Abele was consulted to determine whether the U.S. Fish and Wildlife Service would require an Avian and Bat Protection Plan to be prepared if the Proposed Action were implemented. Mr. Abele provided guidance stating that the U.S. Fish and Wildlife Service would always prefer to see utility companies prepare a plan, but considering the relatively small number of poles proposed, preparation of an Avian and Bat Protection Plan would not be mandatory. Mr. Abele also stated that the proposed pole structures should conform to the raptor-safe design criteria recommended by the Avian Power Line Interaction Committee (2006).
Jenny A. Ericson	U.S. Fish and Wildlife Service	Please see Appendix C.
Mike Podborny	Nevada Department of Wildlife	Please see Appendix C.
Timothy Herrick	Nevada Department of Wildlife	Please see Appendix C.
Eric S. Miskow	Nevada Natural Heritage Program	Please see Appendix C.
Harold C.L. Brewer, M.S., RPA	Chambers Group, Inc.	Mr. Brewer performed a Class III cultural resource inventory of the project area.

In addition to the persons listed in Table 7, the BLM mailed interested party letters to the following Native American tribes:

- Battle Mountain Band Council
- Cedar City Band of Paiutes
- Confederated Tribes of the Goshute Indian Reservation
- Duckwater Shoshone Tribe
- Elko Band Council
- Ely Shoshone Tribe
- Indian Peaks Band
- Kaibab Band of Paiutes Indians
- Las Vegas Paiute Tribe
- Lovelock Paiute Tribe
- Moapa Band of Paiutes
- Paiute Indian Tribe of Utah
- Shivwits Band of Paiutes
- Skull Valley Band of Goshutes
- South Fork Band Council
- Te-Moak Tribes of the Western Shoshone Indians of Nevada
- Wells Band Council
- Winnemucca Indian Colony of Nevada
- Yomba Shoshone Tribe

The Duckwater Shoshone Tribe and the Paiute Indian Tribe of Utah are the only tribes that have responded to the BLM interested party letter. Consultation is ongoing, and participation opportunities remain available. See Section 3.3.5 for a summary of the responses from by the Duckwater Shoshone Tribe and the Paiute Indian Tribe of Utah.

### 5.3 SUMMARY OF PUBLIC PARTICIPATION

The general public was not notified of the Proposed Action prior to preparation of this EA, and therefore a public comment period did not occur. The preliminary EA was posted to the National NEPA Register and letters notifying interested publics of a XXXX-day comment period were sent on January XXXX, 2012.

### 5.4 LIST OF PREPARERS

Lists of the BLM and non-BLM persons responsible for preparing this document are provided in Tables 8 and 9, respectively.

**Table 8 BLM Preparers**

Name	Title	Responsible for the Following Section(s) of this Document
Gina M. Jones	Ecologist/NEPA Coordinator	NEPA Compliance
Stephanie Trujillo	Realty Specialist	Lands and Realty
Erin Rajala	Outdoor Recreation Planner	Recreation, Visual Resource Management
Mark Lowrie	Rangeland Management Specialist	Rangeland Health
Leslie Riley	Archaeologist	Cultural Resources
Marian Lichtler	Wildlife Biologist	Migratory Birds, Special Status Species, Fish and Wildlife

## 5.0 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

<b>Name</b>	<b>Title</b>	<b>Responsible for the Following Section(s) of this Document</b>
Mindy Seal	Natural Resource Specialist	Non-Native Species and Noxious Weeds, Vegetation
Elvis Wall	Native American Coordinator	Native American Religious and Other Concerns
Dave Jacobson	District Wilderness Planner	Wilderness Review
Miles Kreidler	Minerals Specialist	Soils
Mark D'Aversa	Hydrologist	Air Quality, Water Resources, Soil Resources, Wetland/Riparian

**Table 9 Non-BLM Preparers**

<b>Name</b>	<b>Title</b>	<b>Responsible for the Following Section(s) of this Document</b>
Nancy Kang	Project Manager	Technical Review, Quality Review, Water Quality
George Dix	Environmental Analyst	Lands and Realty, Air Quality, Soils, Migratory Birds, Vegetation, Native American Religious and Other Concerns, Recreation, Visual Resource Management
Sara Thorne	Biologist	Non-Native Species and Noxious Weeds, Special Status Species, Fish and Wildlife
Chris Johnson	GIS Specialist	Figures, Geospatial Analysis
Laurel Busch	Editor	Document Editing, Quality Assurance

## 6.0 REFERENCES AND ACRONYMS

### 6.1 REFERENCES CITED

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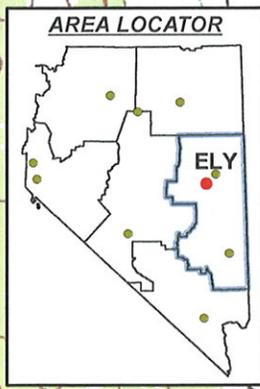
**6.2 ACRONYMS**

<b>BLM</b>	Bureau of Land Management
<b>CFR</b>	Code of Federal Regulations
<b>EA</b>	Environmental Assessment
<b>FLPMA</b>	Federal Land Policy and Management Act
<b>kV</b>	kilovolt
<b>NEPA</b>	National Environmental Policy Act
<b>OSHA</b>	Occupational Safety and Health Administration
<b>RMP</b>	Resource Management Plan
<b>ROW</b>	Right-of-Way
<b>SRPA</b>	Special Recreation Permit Area
<b>USC</b>	United States Code

## Figures



# MWP-PESCOIO



**Legend**

- MWP\_pescio\_powerline\_points
- MWP\_pescio\_powerline\_line
- MWP\_pescio\_substation\_polygon

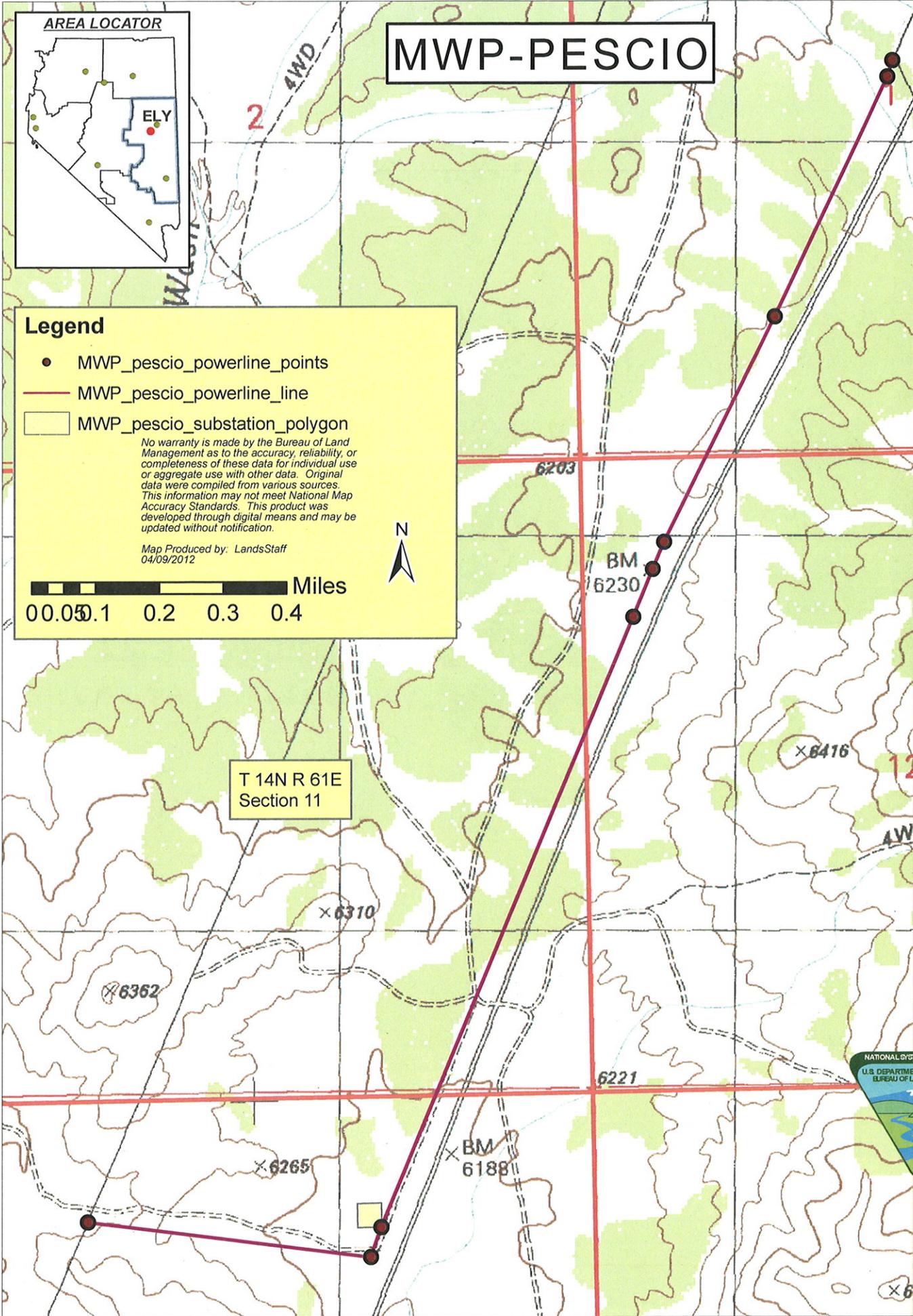
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Map Produced by: LandsStaff  
04/09/2012

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Section 11





Appendix A  
Biological Report





## United States Department of the Interior

**FISH AND WILDLIFE SERVICE**  
Nevada Fish and Wildlife Office  
1340 Financial Blvd., Suite 234  
Reno, Nevada 89502  
Ph: (775) 861-6300 ~ Fax: (775) 861-6301



April 8, 2011  
File No. 2011-SL-0190

Mr. George Dix  
JBR Environmental Consultants, Inc.  
595 Double Eagle Court, Suite 2000  
Reno, Nevada 89521

Dear Mr. Dix:

Subject: Species List Request for the Mount Wheeler Power - Pescio Substation Project,  
White Pine County, Nevada

This responds to your letter received on March 21, 2011, requesting a species list for the Mount Wheeler Power - Pescio Substation Project in White Pine County, Nevada. To the best of our knowledge, no listed or proposed species occur in the subject project area; however, the following is a list of candidate species which may occur in the subject project area:

- Greater sage-grouse (*Centrocercus urophasianus*), candidate

This list fulfills the requirement of the Fish and Wildlife Service (Service) to provide information on listed species pursuant to section 7(c) of the Endangered Species Act of 1973 (ESA), as amended, for projects that are authorized, funded, or carried out by a Federal agency. Candidate species receive no legal protection under the ESA, but could be proposed for listing in the near future. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions.

Greater sage-grouse are known to occur within and/or near the project area; therefore, we recommend that you analyze potential impacts from this project on the species to ensure that the proposed action does not exacerbate further decline of the species. On March 23, 2010, the Service's 12-month status review finding for the species was published in the Federal Register (75 FR 13910). We determined that the greater sage-grouse warrants the protection of the ESA but that listing the species at this time is precluded by the need to address higher priority species

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first. The greater sage-grouse has been placed on the candidate list for future action, meaning the species does not receive statutory protection under the ESA, and States will continue to be responsible for managing the species. The Western States Sage and Columbian Sharp-tailed Grouse Technical Committee, under direction of the Western Association of Fish and Wildlife Agencies, has developed and published guidelines to manage and protect greater sage-grouse and their habitats in the Wildlife Society Bulletin (Connelly *et al.* 2000). We ask that you consider incorporating these guidelines

(<http://www.ndow.org/wild/conservation/sg/resources/guidelines.pdf>) into the proposed project. On a more local level, the Sage Grouse Conservation Plan for Nevada and Portions of Eastern California was completed in June 2004. The Plan is available online at: <http://www.ndow.org/wild/conservation/sg/plan/SGPlan063004.pdf>. We encourage you to adopt all appropriate management guidance from this Plan as you analyze and implement your proposed action and to engage your local State and Federal wildlife biologists early in the project planning process.

The Nevada Fish and Wildlife Office no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. As you may know, the mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (<http://heritage.nv.gov>). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (<http://heritage.nv.gov/forms.htm>) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (<http://www.leg.state.nv.us/NAC/NAC-503.html>). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife to take, or possess any parts of protected wildlife species. Please visit <http://www.ndow.org> or contact the Nevada Department of Wildlife at (775) 777-2300.

If bald eagles (*Haliaeetus leucocephalus*) and/or golden eagles (*Aquila chrysaetos*) occur in the project area or within 10 miles of the proposed project area boundary, we recommend you analyze project impacts to the affected individuals, their habitats, and regional populations. While the bald eagle has been removed from the Federal list of threatened and endangered

species (August 8, 2007; 72 FR 37346), it remains classified as endangered by the States of Nevada and California. Further, the bald eagle along with the golden eagle continues to be protected under the Bald and Golden Eagle Protection Act (BGEPA) of 1940, as amended (16 U.S.C. 668-668d) and the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). Both the BGEPA and the MBTA prohibit take as defined as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, disturb, or otherwise harm eagles, their nests, or their eggs. Under the BGEPA, "disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: 1) injury to an eagle, 2) decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. On September 11, 2009 (74 FR 46836), the Service set in place rules establishing two new permit types: 1) take of bald and golden eagles that is associated with, but not the purpose of, the activity; and 2) purposeful take of eagle nests that pose a threat to human or eagle safety. We recommend you coordinate with State and Federal wildlife officials early in the planning process to ensure compliance with State and Federal regulations and to develop a survey protocol to evaluate the potential risk and the likelihood of take of eagles. If take is reasonably anticipated to occur, we recommend you develop an Avian Protection Plan (APP) in coordination with State wildlife agencies and the Service. An APP is intended to avoid, minimize, or mitigate impacts to these species.

Based on the Service's conservation responsibilities and management authority for migratory birds under the MBTA, we are concerned about potential impacts the proposed project may have on migratory birds in the area. Given these concerns, we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Because wetlands, springs, or streams are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304 regarding the possible need for a permit.

Mr. George Dix

File No. 2011-SL-0190

Please reference File No. 2011-SL-0190 in future correspondence concerning this species list. If you have any questions regarding this correspondence or require additional information, please contact me or James Harter at (775) 861-6300.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jenny A. Ericson".

 Jenny A. Ericson  
Acting State Supervisor

LEO DROZDOFF  
Director

Department of Conservation  
and Natural Resources

JENNIFER E. NEWMARK  
Administrator

BRIAN SANDOVAL  
Governor



Nevada Natural Heritage Program  
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STATE OF NEVADA  
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES  
**Nevada Natural Heritage Program**  
<http://heritage.nv.gov>

22 March 2011

George Dix  
JBR Environmental Consultants, Inc.  
595 Double Eagle Ct., Ste. 2000  
Reno, NV 89521

RE: Data request received 18 March 2011

Dear Mr. Dix:

We are pleased to provide the information you requested on endangered, threatened, candidate, and/or At Risk plant and animal taxa recorded within or near the Mt. Wheeler Power-Pescio Substation Project area (JBR Project # B.A11038.00). We searched our database and maps for the following, a five kilometer radius around:

Township 14N Range 61E Sections 01, 11, 12 and 14

There are no at risk taxa recorded within the given area. However, habitat may be available for, the White River catseye, *Cryptantha welshii*, a Nevada Bureau of Land Management Sensitive Species. The Nevada Department of Wildlife (NDOW) manages, protects, and restores Nevada's wildlife resources and associated habitat. Please contact Chet Van Dellen, NDOW GIS Coordinator (775.688.1565) to obtain further information regarding wildlife resources within and near your area of interest. Removal or destruction of state protected flora species (NAC 527.010) requires a special permit from Nevada Division of Forestry (NRS 527.270).

Please note that our data are dependent on the research and observations of many individuals and organizations, and in most cases are not the result of comprehensive or site-specific field surveys. Natural Heritage reports should never be regarded as final statements on the taxa or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

Thank you for checking with our program. Please contact us for additional information or further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric S. Miskow".

Eric S. Miskow  
Biologist /Data Manager





BRIAN SANDOVAL  
Governor

STATE OF NEVADA  
**DEPARTMENT OF WILDLIFE**

1100 Valley Road  
Reno, Nevada 89512  
(775) 688-1500 • Fax (775) 688-1595

KENNETH E. MAYER  
Director

RICHARD L. HASKINS, II  
Deputy Director

PATRICK O. CATES  
Deputy Director

Sara Thorne  
Environmental Specialist  
JBR Environmental Consultants, Inc.  
595 Double Eagle Court, Suite 2000  
Reno, Nevada 89521

May 20, 2011

Re: Mt. Wheeler Power - Pescio Substation Project

Dear Ms. Thorne:

I am responding to your request for information from the Nevada Department of Wildlife (NDOW) on the known or potential occurrence of wildlife resources in the vicinity of the Mt. Wheeler Power - Pescio Substation Project located in White Pine County, Nevada. In order to fulfill your request an analysis was performed using the best available data from the NDOW's wildlife sight records, commercial reptile collections, scientific collections, raptor nest sites and ranges, greater sage-grouse leks and habitat, and big game distributions databases. No warranty is made by the NDOW as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data. These data should be considered **sensitive** and may contain information regarding the location of sensitive wildlife species or resources. All appropriate measures should be taken to ensure that the use of this data is strictly limited to serve the needs of the project described on your GIS Data Request Form. Abuse of this information has the potential to adversely affect the existing ecological status of Nevada's wildlife resources and could be cause for the denial of future data requests.

To adequately provide wildlife resource information in the vicinity of the proposed project the NDOW delineated an area of interest that included a three-mile buffer around the project area provided by you via email (May 11, 2011) as ESRI shapefiles. Wildlife resource data was queried from the NDOW databases based on this area of interest. The results of this analysis are summarized below.

**Big Game** – Occupied elk, mule deer, and pronghorn antelope distributions exist throughout the entire project area and three-mile buffer area. There are no known bighorn sheep distributions in the vicinity of the project area.

**Greater Sage-Grouse** – Greater sage-grouse summer distribution and nesting habitat exist in the southeastern and eastern portions of the three-mile buffer area. Winter distribution also exists in the southeastern portion of the three-mile buffer area and intersects the southeastern corner of the project area. Sage-grouse core breeding habitat exists in sagebrush communities in the southeastern portion of the three-mile buffer area. Please refer to the attached maps for details regarding sage-grouse distributions relative to the proposed project area.

There are no known greater sage-grouse lek sites in the vicinity of the project area.

**Raptors** – Various species of raptors, which use diverse habitat types, are known to reside in the vicinity of the project area. American kestrel, barn owl, burrowing owl, Cooper's hawk, ferruginous hawk, golden eagle, great horned owl, long-eared owl, merlin, northern goshawk, northern harrier, northern saw-whet owl, osprey, peregrine falcon, prairie falcon, red-tailed hawk, rough-legged hawk, sharp-shinned hawk, short-eared owl, Swainson's hawk, and turkey vulture have distribution ranges that include the project area and three-mile buffer area. Furthermore, bald eagle and golden eagle have been directly observed in the vicinity of the project area.

Raptor species are protected by State and Federal laws. In addition, burrowing owl, ferruginous hawk, northern goshawk, peregrine falcon, short-eared owl, and Swainson's hawk are NDOW species of special concern and are target species for conservation as outlined by the Nevada Wildlife Action Plan.

There are no known raptor nest sites in the vicinity of the project area.

Per the *Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance* (United States Fish and Wildlife Service 2010) we have extended our raptor nest database analysis for bald and golden eagle nest site locations to within ten miles of the proposed project area. One golden eagle nest and no known bald eagle nests exist within ten miles of the project area. The golden eagle nest is located in Township 13 North, Range 61 East, Section 30.

The above information is based on data stored at our Reno Headquarters Office, and does not necessarily incorporate the most up to date wildlife resource information collected in the field. Please contact the Habitat Division biologist supervisor at our Eastern Region Elko Office (775.777.2300) to discuss the current environmental conditions for your project area and the interpretation of our analysis.

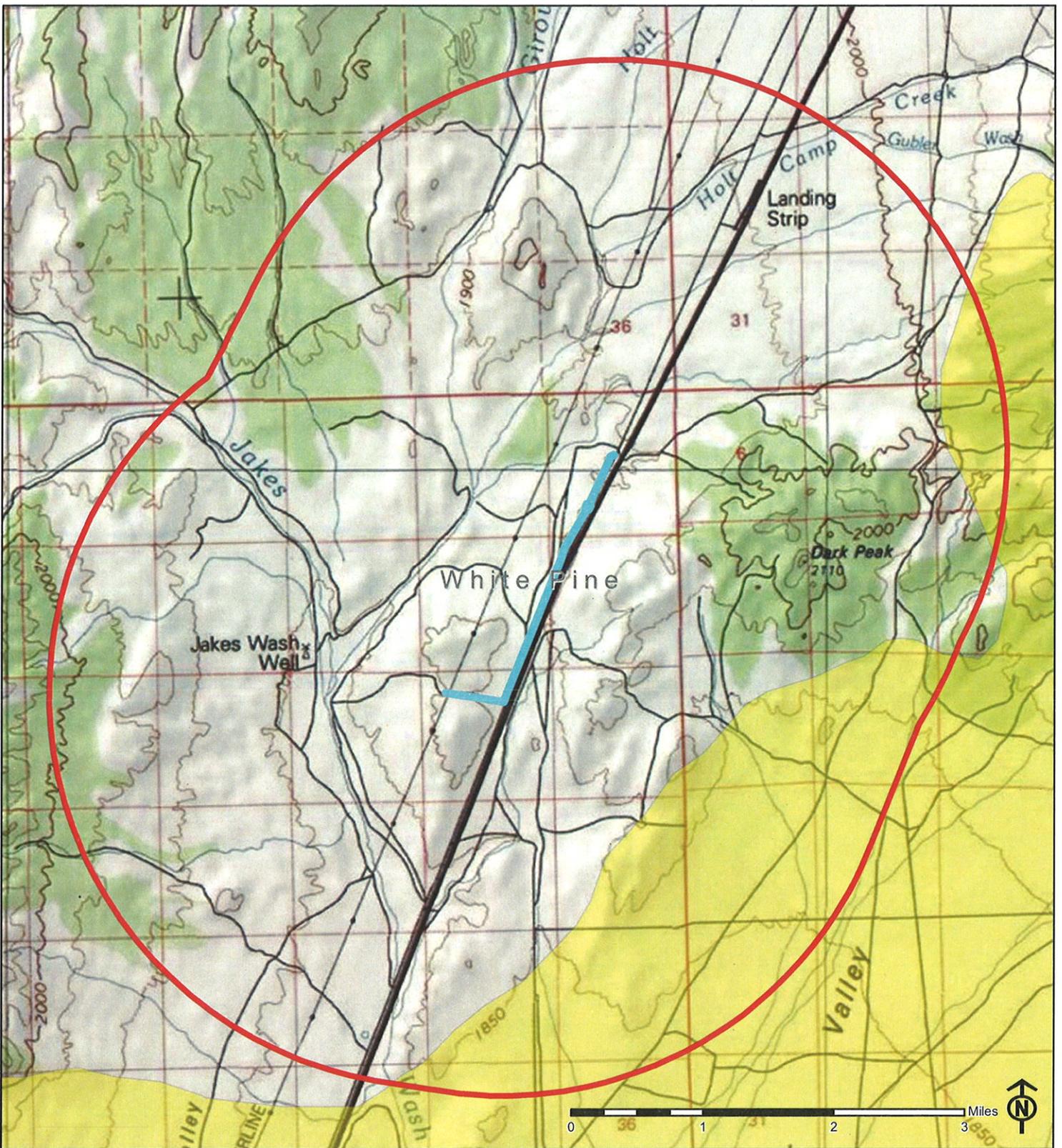
Alan Jenne – Eastern Region Habitat Biologist Supervisor (775.777.2332).

Federally listed Threatened and Endangered species are also under the jurisdiction of the United States Fish and Wildlife Service. Please contact them for more information regarding these species.

If you have any questions regarding the results or methodology of this analysis please do not hesitate to contact our GIS office at (775) 688-1565.

Sincerely,

Timothy Herrick  
Conservation Aide III  
Wildlife Diversity Division



**Legend**

-  Proposed Right-of-Way
-  Three-mile Buffer Area Boundary
-  Sage-grouse Summer Distribution
-  County Boundary



**Pescio Substation Project  
Sage-grouse Summer Distribution**

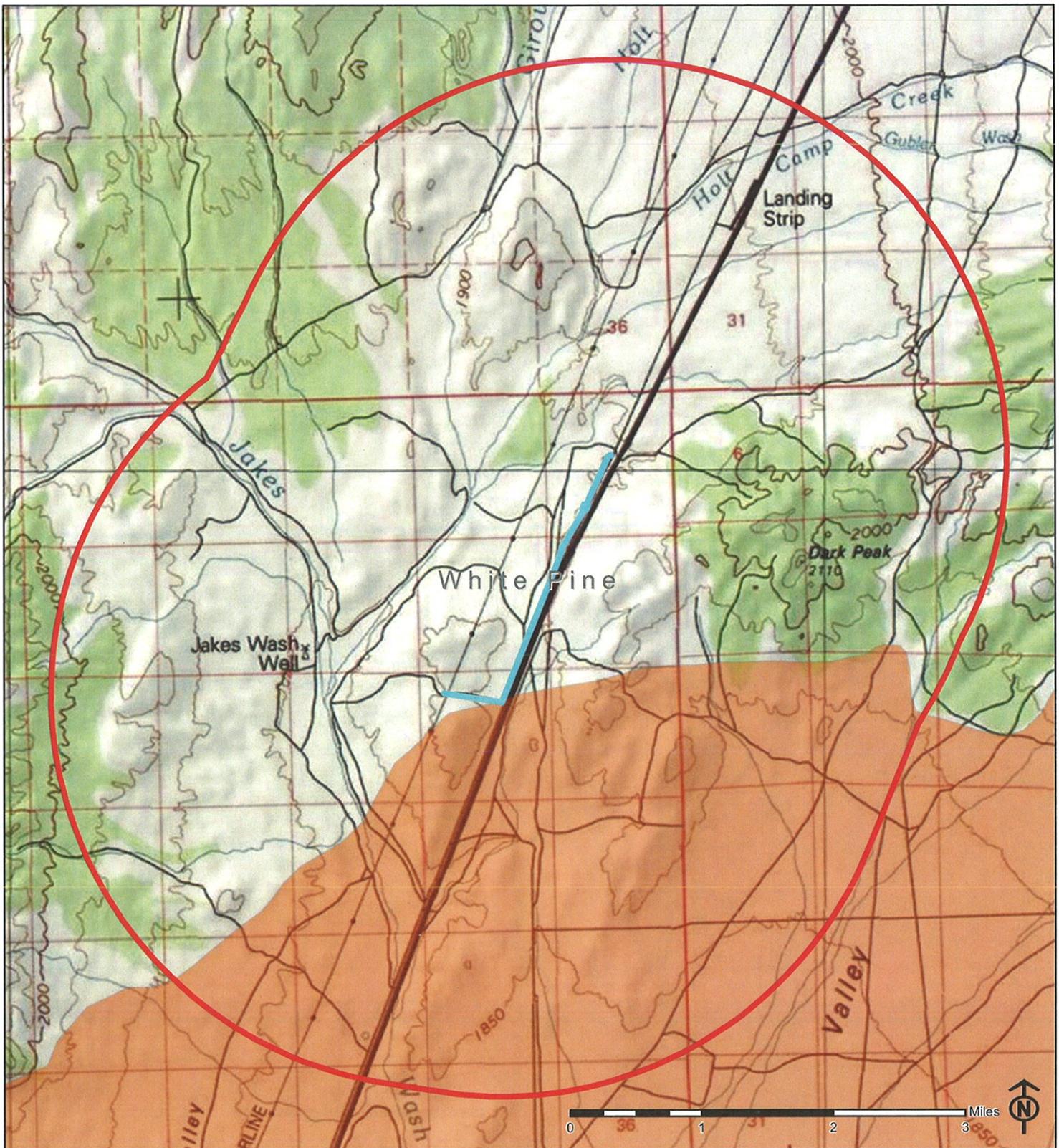


May 17, 2011

Projection: UTM Zone 11 North, NAD83

No warranty is made by the Nevada Department of Wildlife as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data.





### Legend

-  Proposed Right-of-Way
-  Three-mile Buffer Area Boundary
-  Sage-grouse Winter Distribution
-  County Boundary



## Pescio Substation Project Sage-grouse Winter Distribution

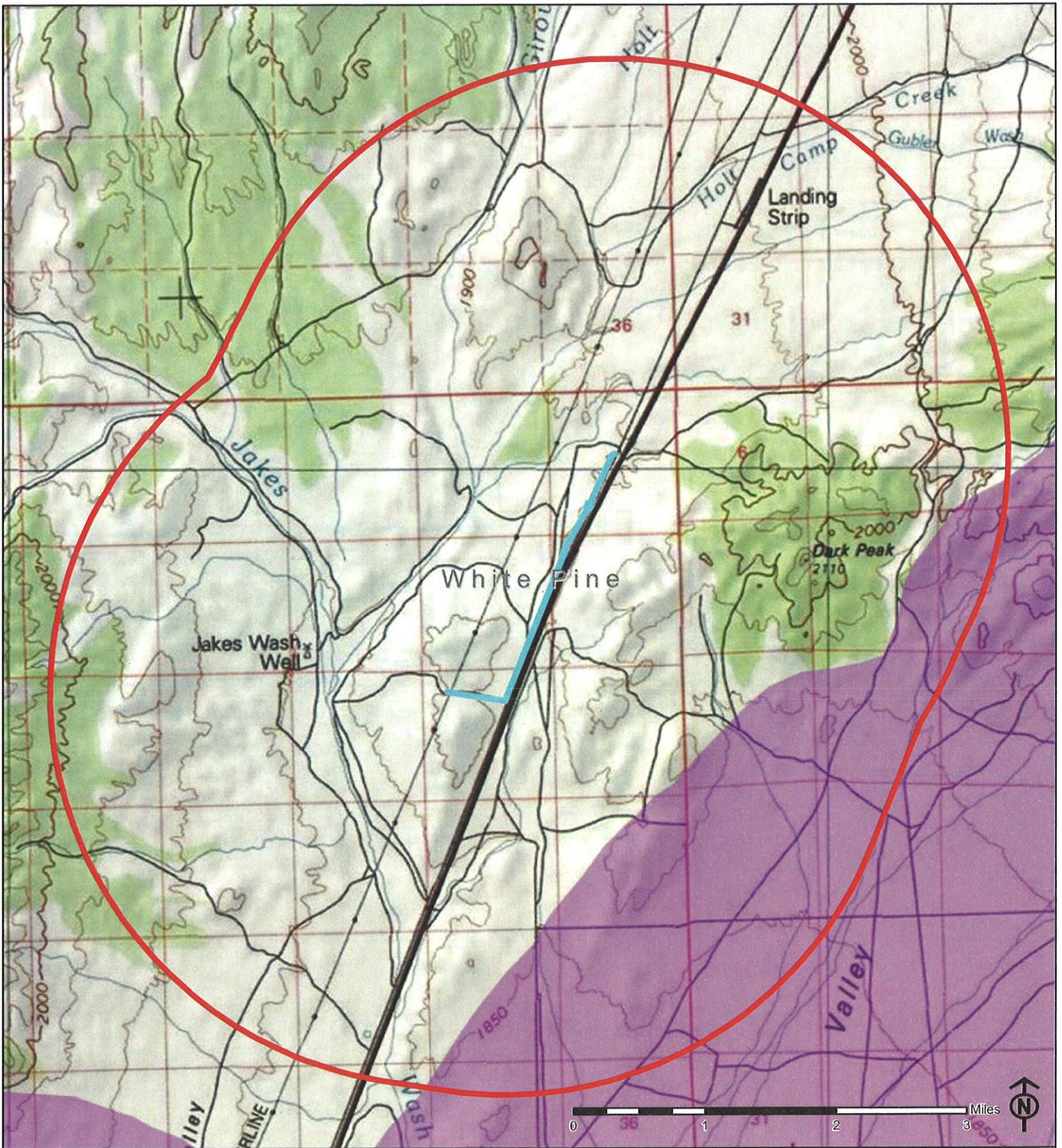


May 17, 2011

Projection: UTM Zone 11 North, NAD83

No warranty is made by the Nevada Department of Wildlife as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data.





**Legend**

-  Proposed Right-of-Way
-  Three-mile Buffer Area Boundary
-  Sage-grouse Nesting Habitat
-  County Boundary



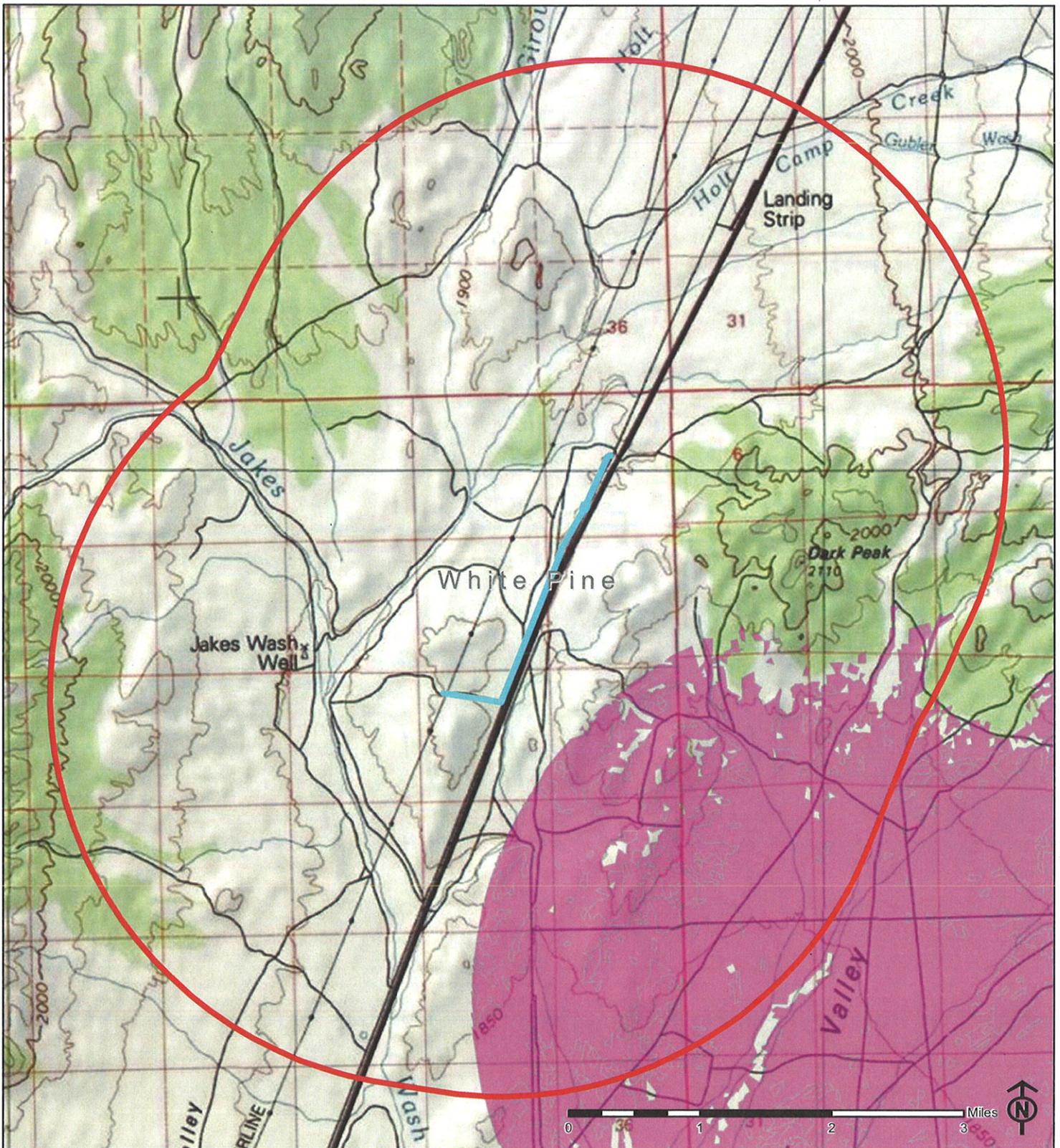
**Pescio Substation Project  
Sage-grouse Nesting Habitat**

May 17, 2011

Projection: UTM Zone 11 North, NAD83

No warranty is made by the Nevada Department of Wildlife as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data.





**Legend**

-  Proposed Right-of-Way
-  Three-mile Buffer Area Boundary
-  Sage-grouse Core Breeding Habitat
-  County Boundary



**Pescio Substation Project  
Sage-grouse Core Breeding Habitat**



May 17, 2011

Projection: UTM Zone 11 North, NAD83

No warranty is made by the Nevada Department of Wildlife as to the accuracy, reliability, or completeness of the data for individual use or aggregate use with other data.



Appendix B  
Noxious Weed Risk Assessment



Appendix C  
Agency Correspondence



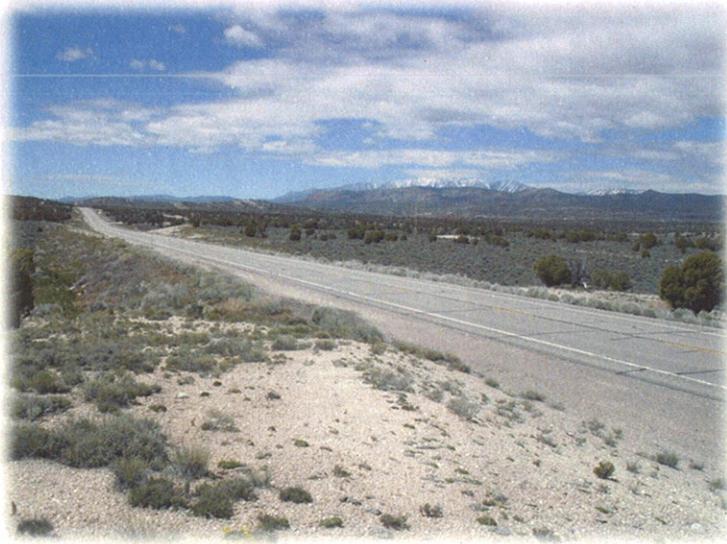
Appendix D  
Visual Resource Management Data





## Key Observation Point - 2

Photograph facing north toward the proposed project area.



**Key Observation Point - 1**

Photograph facing southwest toward the proposed project area.



**Key Observation Point - 2**

Photograph facing west toward the proposed project area.



**Key Observation Point - 2**

Photograph facing northwest toward the location where the proposed substation site would be constructed.