

APPENDIX B2

BIOLOGICAL PROTECTION PLAN

TABLE OF CONTENTS

1.0	Introduction	B2- 1
1.1	Purpose	B2- 1
2.0	Regulatory Compliance	B2- 1
2.1	Federal Endangered Species Act.....	B2- 1
2.2	Bald and Golden Eagle Protection Act	B2- 1
2.3	Migratory Bird Treaty Act.....	B2- 2
2.4	Bureau of Land Management Resource Management Plans.....	B2- 2
2.5	Bureau of Land Management Policies on Special-Status Species.....	B2- 2
2.6	Nevada State Regulations.....	B2- 3
3.0	Biological Resource Concerns and Mitigation.....	B2- 3
3.1	Protection Plan Priorities and Goals.....	B2- 4
3.2	Mitigation Measures	B2- 6

LIST OF TABLES

B2-1	Greater Sage-Grouse Lek Locations	B2-14
B2-2	Flight Diverter Placement.....	B2-23
B2-3	Known Rare Plant Locations	B2-24

LIST OF FIGURES

B2-1	Desert Tortoise Habitat Map	B2- 7
B2-2	Sage Grouse Habitat Map.....	B2-15
B2-3	Other Key Biological Concerns Map	B2-19

1.0 INTRODUCTION

This Biological Protection Plan (BPP) is in support of design, construction, and operation of the projects, located in portions of White Pine, Lincoln, Nye, and Clark counties, in Nevada. The plan includes information on (1) regulatory requirements related to biology resources, and (2) biology concerns and mitigation, including priority concerns and measures to specifically address key biological resources.

1.1 Purpose

The purpose of the BPP is to ensure the protection of sensitive biological resources (i.e., wildlife, plants, and habitat) through the appropriate and effective application of mitigation measures. The BPP provides guidance on specific biological concerns associated with the project and identifies the mitigation measures, stipulations, protocols, and/or techniques that are required to minimize impacts to biological resources.

2.0 REGULATORY COMPLIANCE

Following is a brief overview of regulatory compliance acts, and federal and state requirements that will be adhered to, and have been considered in the development of the BPP.

2.1 Federal Endangered Species Act

Pursuant to the federal Endangered Species Act (ESA) of 1973, the U.S. Fish and Wildlife Service (USFWS) has authority over projects that may affect the continued existence of a species federally listed as Threatened or Endangered. If a project may affect a federally listed species, federal consultation under Section 7 of the ESA is required between the lead federal agency and USFWS. Under the ESA, the definition of “take” includes to kill, harm, or harass any federally listed species. The USFWS has interpreted the definition of harm to include significant habitat modification. During the environmental impact statement (EIS) process and prior to surveys conducted in 2006, the USFWS was contacted regarding federally protected species that may occur in or near the project areas. The Mojave population of the Desert Tortoise was identified as a Threatened Species listed under the ESA and has been addressed in the Biological Assessment (BA) and the Biological Opinion (BO) for the SWIP – Southern Portion as well as in this BPP. The Biological Opinion issued by the USFWS is contained in this COM Plan in Appendix B1 – Biological Opinion.

2.2 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC 668) applies primarily to taking, hunting, and trading activities that involve Bald or Golden eagles. The act prohibits the “taking” of any individuals of these two species, as well as any part, nest, or egg. The term “take” as used in the act includes “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.” For these projects, it includes potential disturbance to nesting Golden Eagles.

2.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703) makes it unlawful to pursue, hunt, take, capture, kill, or possess any migratory bird, or part, nest, or egg of such bird listed in wildlife protection treaties among the United States and Great Britain (on behalf of Canada), Mexico, Japan, and the former USSR. This act also contains a clause that prohibits baiting or poisoning of these bird species. The current list of species covered by MBTA can be found in Title 50, Code of Federal Regulations Sec. 10.13. Because a number of migratory bird species may occur within the overall project corridor, the MBTA applies to those bird species that may be affected during the construction phase of either project. Compliance with the MBTA will require surveying for, delineating, and adhering to non-disturbance buffers for nesting birds during the breeding season.

2.4 Bureau of Land Management Resource Management Plans

The Bureau of Land Management's (BLM's) Resource Management Plans (RMPs) provide management guidance and standards for wildlife and wildlife habitat on public land managed by the BLM. BLM field offices monitor wildlife and habitat conditions and maintain crucial wildlife habitat jointly with the Nevada Department of Wildlife (NDOW). Together the BLM and NDOW manage habitat for Mule Deer, Pronghorn Antelope, Elk, Bighorn Sheep, and other game species in the area affected by the projects. The BLM manages habitat for wildlife species by assessing the ability of a land area to supply the forage, cover, water, and space requirements of wildlife. Trend studies determine the directional change of a habitat from or toward desired conditions. These habitat and trend studies (BLM Manual 6630.2, 6630.3, and 6630.4) allow the BLM to adjust management prescriptions through grazing or other public uses to improve habitat for big game. Portions of the route cross areas that have winter-range habitat for Mule Deer, Elk, and Pronghorn, and as such, have seasonal restrictions within this area.

2.5 Bureau of Land Management Policies on Special-Status Species

In Nevada, the BLM implements policies for "special-status" species found on BLM-managed land. BLM's list of special-status species includes the following three categories:

1. Federally listed as Threatened or Endangered, Proposed, and Candidate Species
2. Nevada State Protected Species
3. Nevada BLM Sensitive Species

Nevada State Protected Species that meet BLM's new policy definition (BLM, 2001) includes 25 animal species and 13 plant species occurring on public lands managed by the BLM. BLM affords these species the same level of protection as federal Candidate species. Additionally, BLM, NDOW and Nevada Division of Forestry (NDF) have identified 71 animals and 16 plants (including the previously mentioned species) as sensitive. These species have been addressed in the SWIP – Southern Portion BA, Appendix A, which is available through the BLM. BLM Sensitive Species are those for which population viability is a concern. Concern is warranted by a downward trend in population numbers, density, or habitat conditions that would reduce a species existing distribution. The BLM is responsible for ensuring that its actions do not cause Sensitive Species to become Threatened or Endangered. Several special-status wildlife species, addressed in this BPP, are considered Sensitive Species by the BLM and are afforded

protection (e.g., Greater Sage Grouse). Most of these species require limiting disturbance during the nesting season, while others require year-round protection through measures identified to protect habitat.

2.6 Nevada State Regulations

NDOW and NDF have established a list of species that are rare or declining in all or portions of their range within the State of Nevada. NDOW's listed species are "protected" under the authority of Nevada Revised Statutes (NRS) 501.100-503.104 (wildlife) and NRS 527.050 (plants). When these species occur on BLM-managed land, the BLM affords them the same level of protection as BLM Sensitive Species, previously described.

3.0 BIOLOGICAL RESOURCE CONCERNS AND MITIGATION

Throughout the planning stages of the projects, key biological concerns have been identified, including appropriate mitigation measures that are to be applied, to ensure the protection of the biological resources found within the project areas. These biological considerations have been addressed in the BA and BO, Section 6 of the COM Plan, and in this BPP. The BO is included in this COM Plan in Appendix B1 – Biological Opinion and Appendix A of the BA is available through the BLM.

The 2007 BA that was prepared covered the Threatened and Endangered species potentially affected by either of the projects, including the Bald Eagle, Southwestern-Willow Flycatcher, and the Desert Tortoise (Mojave Population.) In addition to the BA, and included in Appendix A of the BA, special status species identified by BLM and NDOW also were addressed including the western U.S. distinct population segment of the Yellow-billed Cuckoo, and the Las Vegas buckwheat (potential for threatened and endangered listing). During the development of the COM Plan, and to assist in mitigation planning, extensive meetings were held with BLM biologists and representatives from NDOW. During these meetings a list of key species and priority concerns were developed and mitigation measures were identified to address those concerns.

In particular, two specific wildlife species of concern were acknowledged by the BLM as warranting special protection, the Mojave Desert Tortoise and the Greater Sage Grouse. In addition, the BLM and NDOW determined that the following biological resource considerations also were key:

- Desert Bighorn Sheep
- Big Game Habitat (i.e., Mule Deer, Elk, and Pronghorn)
- Migratory Birds
- Rare and Sensitive Plants
- Noxious Weeds (see Appendix B3 – Noxious Weed Management Plan)

Specific and detailed information for protecting these species and addressing these biological concerns is the focus of this BPP. Regarding the remaining wildlife and plants that are found within the project areas, general guidelines and mitigation procedures also have been identified to assist in minimizing impacts to the degree possible. These mitigation measures, including

stipulations to minimize disturbance levels and restoration practices, are found in other appendices of the COM Plan.

3.1 Protection Plan Priorities and Goals

In identifying potential mitigation measures for the projects, five general categories (or types) of impacts have been given priority, with respect to biological resources. Following is a description of these impact types and the goals that have been established to address these concerns in this plan.

3.1.1 Predation

Goal - Identify and design effective measures to reduce the potential for increased predation by avian predators due to significant increases in perches (transmission line towers, and from the introduction of domestic animals).

Construction of the projects potentially could increase avian predation levels on several types of wildlife within the project areas. The most likely source of predators, within the project areas, will be raptors, such as Red Tailed Hawks, Golden Eagles, and Ferruginous Hawks, as well as the corvid Common Raven. In particular, NDOW has expressed concerns regarding raven predation. Population increases in Ravens are likely due to increased food supplies (e.g., agricultural developments, landfills, garbage dumps, trash, and road kill), as well as increased sites for nests and perches (e.g., power poles and towers, fence posts, buildings, bridges, and signs). Installation of new transmission line structures will increase perching and roosting areas for eagles and ravens and may lead to increased predation on local wildlife populations. Within the project areas, the greatest predation concerns are associated with Sage Grouse (located in both the SWIP – Southern Portion and SWIP – Central Portion) and the Mojave Desert Tortoise (located in the SWIP – Southern Portion).

Domestic and feral dogs are a relatively new, and potentially significant, source of mortality (Berry 1979; Causey and Cude 1978). Basically, it has been observed that animals brought to construction sites can and have preyed on local sensitive wildlife.

3.1.2 Habitat Degradation

Goal - Identify and design effective measures to address potential degradation of plant and animal habitat due to ground disturbance, invasive species and fragmentation of leks, burrows, foraging areas, birthing areas, and other areas of critical habitat or high use by wildlife.

Habitat degradation can occur for a variety of reasons, such as fragmentation of high-quality habitat, loss of cover and foraging material due to soil disturbance and subsequent colonization of exotic plant species and noxious weeds, foraging areas bisected by new roads or fences, and increased human and vehicular traffic that create a variety of disturbances that degrade the quality of habitat.

The construction of new access roads, the widening of existing roads, and construction and placement of transmission line support towers, and substation are activities most likely to potentially degrade existing habitat within the project areas.

3.1.3 Wildfire

Goal - Identify and design effective measures for preventing wildfires from occurring due to human activity in the project areas.

Changing conditions of the landscape, due to various land use practices, have created a trend toward landscapes that have a denser, higher fuel load and consequently are more likely to burn. Areas of habitat that burn often recover, but with a greatly changed landscape that is more susceptible to colonization of exotic plants, which over time can cause a conversion. These converted landscapes can offer dramatically decreased forage, cover, and overall diversity of resources than the previous landscape. The most likely cause of wildfires within the project areas will be human activities related to the construction of roads and the transmission line. Detailed mitigation measures to specifically address the avoidance and control of wildfires are presented in Appendix A6 – Fire Protection Plan.

3.1.4 Disturbance

Goal - Identify and design effective measures for minimizing disturbance of wildlife and plants by heavy equipment, machinery, or other human activity in the project areas.

Disturbance in this case relates to the direct interference with wildlife. Increased traffic on existing roads with little traffic and located near a foraging, breeding, birthing, or bedding ground, is an example of a disturbance that could cause wildlife to relocate. Physical alteration to a site, such as construction activities or the presence of permanent features that did not exist before, also constitutes another source of disturbance.

Within the project areas, the most likely disturbances will be increased traffic on existing and newly constructed roads; increased noise levels due to construction of roads, erection of transmission line structures, substations, and ancillary facilities; and, disturbance related to facility and road maintenance.

3.1.5 Human Contact

Goal - Identify and design effective measures for minimizing or eliminating human contact with wildlife in the project areas.

Increased human traffic within the project areas, during construction, will present the greatest opportunity for human/wildlife encounters. Most encounters are likely to occur on or along roads and the right-of-way. Potential issues associated with human contact include disturbance (as previously identified) and the potential for harassment to, and/or the “illegal” taking of protected wildlife and plants.

3.2 Mitigation Measures

This section of the BPP describes detailed mitigation intended to achieve the goals for the key species previously identified. Included in this discussion are (1) a background summary for each key species; (2) concerns related to each species; and (3) specific mitigation measures to address these concerns during the design, construction, and operation of project facilities. Other general and specific mitigation measures, protocols, and procedures also are identified in the BO (see Appendix B1 – Biological Opinion), which should be referenced with respect to information provided in this section.

3.2.1 Desert Tortoise

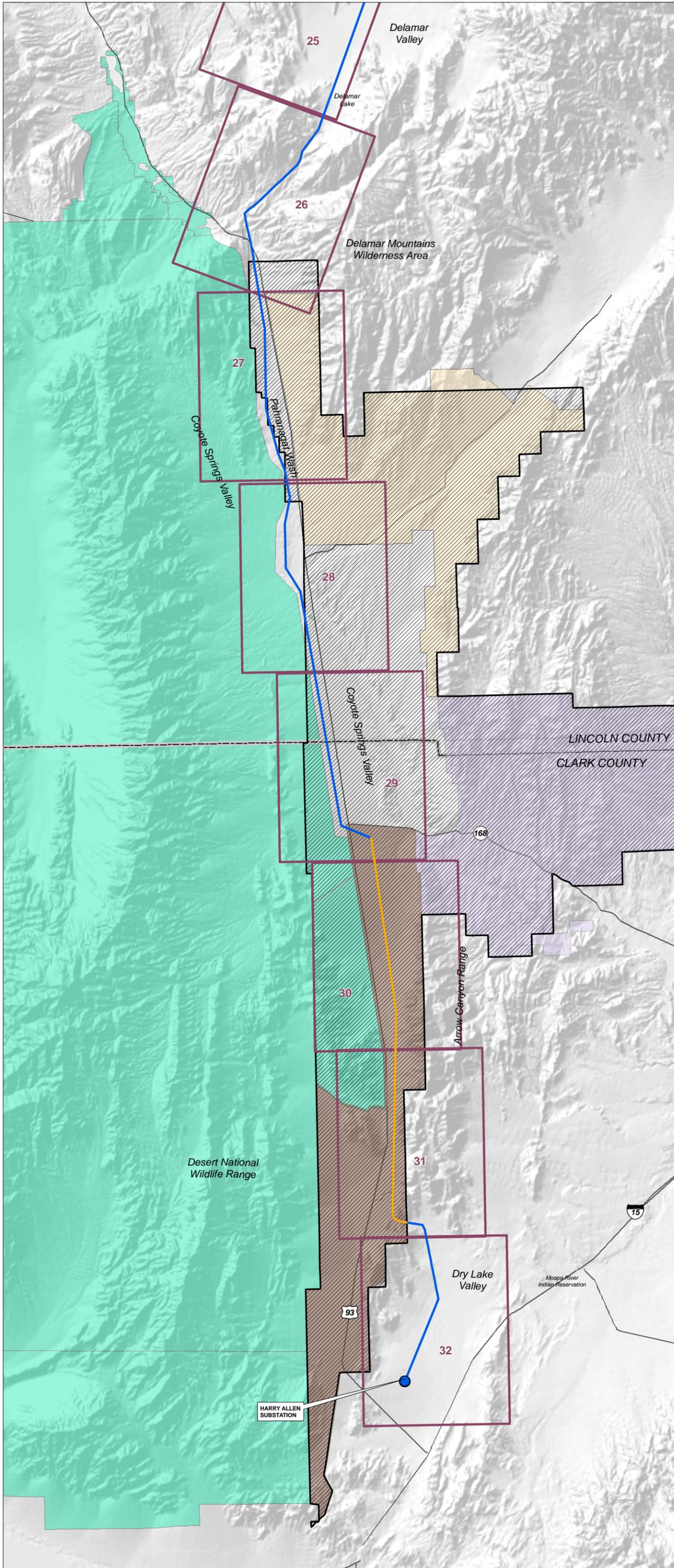
Background

The SWIP – Southern Portion traverses approximately 65 miles of Desert Tortoise habitat between an area south of the Delamar Lake to Harry Allen Substation. In this area, approximately 53 miles are designated as critical habitat for the Tortoise. The transmission line corridor enters critical habitat south of the Pahranaagat Valley, and as it continues south along Highway 93 through Coyote Spring Valley it is located wholly within designated critical habitat, with the exception of a small amount of land west of Highway 93 and the Kane Springs Road. As the transmission line continues south into Dry Lake Valley, designated critical habitat includes portions of the Coyote Springs Area of Critical Environmental Concern (ACEC) (Figure B2-1, Desert Tortoise Habitat Map, and COM Plan Volume II, Map Sets 1 and 2).

Concerns

Predation, habitat degradation, wildfire, and disturbance are primary concerns for Desert Tortoise and their habitat. Generic mitigation efforts, applied project-wide for the SWIP – Southern Portion will mitigate many of these concerns. For very specific concerns and situations, Desert Tortoise mitigation measures have been identified, allowing for additional protection.

Human/tortoise interactions during project construction will most likely occur on roads and at tower erection sites, staging, and laydown areas where traffic will be highest. Human activities that potentially have an effect on the Desert Tortoise, include, but are not limited to, capture and removal of Desert Tortoises (predation for collections, commercial trade, and pets), translocation and release of pet Desert Tortoises, dumping of various wastes, road kill, construction of trails and roads, invasion of non-native plants, fire, and predation by Ravens and dogs. As the number of visitors increase, the potential for loss(es) of Desert Tortoises and their habitats increases.



REGIONAL LOCATION



Key Desert Tortoise and Management Areas

- Desert Tortoise Critical Habitat
- Coyote Springs ACEC
- Kane Springs ACEC
- Mormon Mesa ACEC
- Desert National Wildlife Refuge

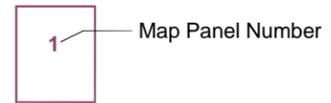
Electrical Transmission Facilities

- SWIP 500kV Transmission Line
- Lattice Structures
- H-Frame Structures
- Harry Allen Substation

General Reference Features

- County Boundary
- Major Transportation

COM Plan Volume II
Map Set 1 - Index



Sources

USGS, 30 meter Digital Elevation Models
BLM - Nevada State Office, ACEC 2005
Ely RMP July 2005



SOUTHWEST INTERTIE PROJECT
500kV Transmission Line
Southern Portion

Great Basin Transmission, LLC

Desert Tortoise Habitat Map

August 2008

Figure B2-1

Mitigation

Following is a list of design/engineering, construction, and operation and maintenance measures designed to protect the Desert Tortoise. As previously discussed, the BO (Appendix B1 – Biological Opinion) should be specifically reviewed in context with this information for regulatory compliance with respect to the Mojave Desert Tortoise and the construction, operation, maintenance, and monitoring requirements for transmission line facilities.

Design and Engineering

- Consideration has been given to the use of existing and overland access, as well as minimizing the disturbance associated with the improvement or addition of new access in the layout of facilities, to the degree possible. Where practicable, transmission structures have been located to minimize disturbance to habitat.
- Modified tower design, including H-frame structures and perch deterrents, will be used in areas of critical habitat within the Coyote Spring ACEC south of State Route 168 (see Figure B2-1).

General Construction

- An authorized Desert Tortoise biologist will be onsite during project activities within Desert Tortoise habitat. Biologists, monitors, or anyone responsible for conducting monitoring or Desert Tortoise field activities associated with the project shall complete the Qualifications Form (Attachment A to the BO) and submit it for USFWS review and response.
- Prior to initiation of construction, an authorized biologist or authorized monitor shall present a Desert Tortoise awareness program to all personnel who will be onsite, including but not limited to contractors, contractors' employees supervisors, inspectors, and subcontractors. This program will contain information concerning the biology and distribution of the Desert Tortoise and other sensitive species, their legal status and occurrence in the SWIP – Southern Portion project area; the definition of “take” and associated penalties; the terms and conditions of the BO; the means by which employees can help facilitate this process; responsibilities of workers, monitors, biologists, and CIC; and reporting procedures to be implemented in case of Desert Tortoise encounters or non-compliance with the BO. The name of every individual trained will be recorded on a sign-in sheet. Each trained individual will be given evidence indicating they have received this training and will keep that evidence with them at all times when they are in this area.
- Immediately prior to vehicle and equipment travel on the right-of-way, USFWS-authorized individuals shall survey for Desert Tortoises and their burrows using techniques providing 100-percent coverage of the right-of-way and an additional area approximately 90 feet from both sides of the right-of-way. Transects will be no greater than 30 feet apart. All potential Desert Tortoise burrows will be examined to determine occupancy of each by Desert Tortoises and handled in accordance with the following Term and Condition.

- All potential Desert Tortoise burrows located within this project area that are at risk for damage shall be excavated by hand by authorized personnel, tortoises removed, and collapsed or blocked to prevent occupation by Desert Tortoises. All Desert Tortoise handling and removal, and burrow excavations, including nests, shall be conducted in accordance with the USFWS-approved protocol (Desert Tortoise Council 1994, revised 1999). If the USFWS or Desert Tortoise Council releases a revised protocol for handling of Desert Tortoises before initiation of project activities, the revised protocol shall be implemented for this area. Alternatively, tortoises may be temporarily penned to ensure their safety in accordance with the following Term and Condition.
- Desert Tortoises found in this project area sheltering in a burrow during a period of reduced activity (e.g., winter) may be temporarily penned. Tortoises should not be penned in areas of moderate or heavy public use. Penning shall be accomplished by installing a circular fence, approximately 20 feet in diameter to enclose the tortoise/burrow. The pen should be constructed with durable materials (*d.g.*, 16 gauge or heavier) suitable to resist desert environments. Fence material should consist of 1/2-inch hardware cloth or 1-inch horizontal by 2-inch vertical, galvanized welded wire. Pen material should be 24 inches in width. Steel T-posts or rebar (3 to 4 feet) should be placed every 5 to 6 feet to support the pen material. The pen material should extend 18 to 24 inches aboveground. The bottom of the enclosure shall be buried several inches; soil mounded around the base; and other measures should be taken to assure zero ground clearance. Care shall be taken to minimize visibility of the pen by the public. A biologist, monitor, or designated worker shall check the pen daily.
- The boundaries of all areas to be disturbed shall be flagged before beginning any activities, and all disturbances shall be confined to the flagged areas. All construction vehicle movement outside the right-of-way will be restricted to pre-designated access, contractor acquired access, or public roads. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits. Disturbance beyond the construction zone is prohibited. Authorized Desert Tortoise biologists will ensure that project vehicles and equipment occur only in designated areas.
- All fuel, transmission or brake fluid leaks, or other hazardous materials shall not be drained onto the ground or into streams or drainage areas. All petroleum products and other potential hazardous materials shall be removed to a disposal facility authorized to accept such materials. Waste leaks, spills, or releases shall be reported immediately to BLM. BLM or the Project Proponent responsible for spill material removal and disposal to an approved off-site landfill. Servicing of construction equipment will take place only at a designated area. All fuel or hazardous waste leaks, spills or releases will be stopped or repaired immediately and cleaned up at the time of occurrence. Service and maintenance vehicles will carry a bucket and pads to absorb leaks or spills
- No widening or upgrading of existing access roads, as identified in this COM Plan (see Volume II, Map Sets 1 and 2), will be undertaken in the area of construction and operation in Desert Tortoise habitat, except for repairs necessary to make roads passable, without the filing of a project variance and approval by the BLM and the CIC (refer also to Section 4.0 – Deviations During Construction of the COM Plan). The alignment of any new access roads or overland route shall follow the designated area's

landform contours where possible, providing that such alignment does not additionally impact resource values.

- In construction areas where recontouring is not required, vegetation will be left in place wherever possible and original contour will be maintained to avoid excessive root damage and allow for resprouting. In construction areas where ground disturbance is significant or where recontouring is required, surface restoration will occur as required by BLM. The method of restoration will normally consist of returning disturbed areas back to their normal contour, reseeding (if required), cross drains installed for erosion control, placing water bars in the road, and filling ditches.
- To the extent possible, access to tower sites, and at splicing and tensioning sites will occur by overland travel (*i.e.*, no blading of access will occur). The CIC will ensure that blading is conducted only where necessary. Due to construction constraints resulting from equipment size and personnel safety, blading would be needed at most spur roads and tower sites.
- All movement of construction vehicles outside of the right-of-way will be restricted to pre-designated access, contractor-acquired access, or public roads.
- Construction and maintenance vehicles will not exceed a speed of 15 to 20 miles per hour in tortoise habitat. (In Clark County speed limits are restricted to 15 miles per hour, as required for dust control [see Appendix A5 – Erosion, Dust Control, and Air Quality Plan]). Authorized Desert Tortoise biologists and/or monitors will ensure compliance with speed limits during construction.
- Project personnel shall exercise caution when commuting to this project area and obey speed limits to minimize any chance for the inadvertent injury or mortality of species encountered on roads leading to and from the project site. All Desert Tortoise observations, including mortalities, shall be reported directly to an authorized Desert Tortoise biologist and the USFWS. Pets will be prohibited on the project.
- Any vehicle or equipment on the right-of-way within Desert Tortoise habitat will be checked underneath before moving. This includes all construction equipment and the area under vehicles should be checked any time a vehicle is left unattended, as well as in the morning before and construction activity begins. If a Desert Tortoise is observed, an authorized biologist will be contacted.
- The biologist shall ensure that no habitat is disturbed outside designated areas as a result of the project, including ensuring that all vehicles and equipment remain on the right-of-way or areas devoid of native vegetation. All cross-country travel and travel outside designated areas is prohibited.
- All Desert Tortoises observed within this project area or access road shall be reported immediately to the authorized biologist. The biologists shall halt activities as necessary to avoid harm to a Desert Tortoise. Project activities that may endanger a Desert Tortoise shall cease until the Desert Tortoise moves out of harm's way or is moved out of harm's way by an authorized Desert Tortoise biologist.

- Any excavated holes (i.e., foundations) left open overnight will be covered, and/or tortoise-proof fencing will be installed to prevent the possibility of tortoises falling into them.
- Overnight parking and storage of equipment will be in previously disturbed areas (i.e., lacking vegetation). These areas will also be designated by the pre-construction survey team. If previously disturbed areas are not available, these activities will be restricted to the right-of-way and will be cleared of tortoises by the on-site biologist prior to use.
- Trash and food items will be promptly disposed in predator-proof containers with re-sealing lids. Trash containers will be emptied daily, and waste will be removed from this project area and disposed in an approved off-site landfill.
- Dust control practices, specifically the use of water, will be monitored to ensure that pooling of water does not occur.
- Pets will not be allowed on the transmission line right-of-way during construction to prevent mortality, injury, and harassment of Desert Tortoises and damage to their burrows or coversites.
- Activities will be conducted in accordance with the stipulations identified in Appendix A6 – Fire Protection Plan.
- Pre-construction surveys shall be conducted for noxious weeds as stipulated by BLM once the transmission line centerline, access roads, and tower sites have been located and staked in the field. BLM shall ensure that noxious weeds are monitored and appropriate control measures are implemented to ensure that weeds do not establish on the right-of-way.
- In areas where restoration is required, reseeding will occur through the use of native plant species. Reclamation and monitoring requirements and practices including seed mixes will be approved by BLM. Herbicides (pesticides) will not be used as part of this project.

Compliance

- BLM shall designate a CIC to oversee compliance with the protective stipulations for the Desert Tortoise and coordinating **directly** with BLM and the USFWS. The CIC shall have the authority to halt all activities or construction equipment that may be in violation of the stipulations. BLM shall provide a copy of the terms and conditions of the BO to the CIC and biologists for the SWIP – Southern Portion. The CIC and Biologist will prepare a report for BLM and the USFWS no more than 90 days after completion of construction within Desert Tortoise habitat. The report will make recommendations for modifying or refining the stipulations, and include the actual acreage of habitat disturbance caused by crushing and blading versus the estimates prior to construction.
- The on-site biologist shall record each observation of Desert Tortoise handled. Information will include the following: location, date and time of observation; whether tortoise was handled, general health and whether it voided its bladder; location tortoise

was moved from and location moved to; and unique physical characteristics of each tortoise.

Blasting Protocols

- If blasting is necessary, all tortoises located within 100 feet of the blast site will be removed and temporarily relocated in accordance with Desert Tortoise protocol, prior to blasting. Prior to any blasting all tortoise burrows or coversites within a 200-foot radius of the blast site will be located and the entrances carefully stuffed with crumpled newspaper or other material approved by BLM and the USFWS. After blasting is completed, all burrows and coversites will be inspected for damage, and stuffing material will be removed. If a burrow or coversite has collapsed and there is a possibility it could be occupied, it will be excavated to ensure that no tortoises have been buried and are in danger of suffocation.

Live Tortoises Found Above Ground in Project Area

- Desert Tortoises found within construction sites will be removed by an authorized Desert Tortoise biologist or authorized monitor in accordance with the most current protocols identified by BLM and the USFWS. Desert Tortoises will be moved solely for the purpose of moving them out of harm's way. Desert Tortoises will be relocated up to 1,500 feet into adjacent, undisturbed habitat on protected public land in accordance with USFWS - approved handling protocol (Desert Tortoise Council 1994, revised 1999). The disposition of all tortoises handled shall be documented.
- Desert Tortoises shall be treated in a manner to ensure that they do not overheat, exhibit signs of overheating (e.g., gaping, foaming at the mouth), or are placed in a situation where they cannot maintain surface and core temperatures necessary to their well-being. Desert Tortoises shall be kept shaded at all times until it is safe to release them. No Desert Tortoise shall be captured, moved, transported, released, or purposefully caused to leave its burrow for whatever reason when the ambient temperature is above 95 degrees Fahrenheit. Ambient air temperature shall be measured in the shade, protected from wind, at a height of two inches above the ground surface. No Desert Tortoise shall be captured if the ambient air temperature is anticipated to exceed 95 degrees Fahrenheit before handling and relocation can be completed. If the ambient air temperature exceeds 95 degrees Fahrenheit during handling or processing, Desert Tortoises shall be kept shaded in an environment that does not exceed 95 degrees Fahrenheit and the animals shall not be released until ambient air temperature declines to below 95 degrees Fahrenheit.
- Desert Tortoises shall be purposely moved only by qualified tortoise biologists, solely for the purpose of moving them out of harm's way.
- Desert Tortoises shall not be placed on land outside the administration of the federal government without the written permission of the private landowner.

Tortoise Burrow Found in Project Area

- All Desert Tortoise burrows located will be flagged or marked.
- Any Desert Tortoise removed from construction sites shall be placed in an unoccupied burrow similar to the one in which it was found or in an artificial burrow, following the protocol approved by the BLM and USFWS.

Tortoise Eggs Found in Project Area

- Desert Tortoise eggs found within construction sites will be removed by qualified tortoise biologists, in accordance with BLM and USFWS protocols, and reported to the CIC.

Dead or Injured Tortoise

- Should any Desert Tortoise be killed or injured in association with the proposed action, all activity in the vicinity of the incident shall cease and the Project Proponent shall immediately contact the USFWS.
- Dead Desert Tortoises suitable for preparation as museum specimens shall be frozen immediately and provided to an institution holding appropriate federal and state permits per their instructions.
- Should no institutions want the Desert Tortoise specimens, or if it is determined that they are too damaged (crushed, spoiled, etc.) for preparation as museum specimens, they may be buried away from the project area or cremated, upon authorization by the USFWS.
- BLM shall bear the cost of any required treatment of injured Desert Tortoises, euthanasia of sick Desert Tortoises, or cremation of dead Desert Tortoises.
- Injured tortoises will be transported to a qualified veterinarian and reported to the USFWS's Nevada Fish and Wildlife Office in Las Vegas (702) 515-5230.
- Should sick or injured Desert Tortoises be treated by a veterinarian and survive, they may be transferred as directed by the USFWS.

Operation and Maintenance

- In areas of critical Desert Tortoise habitat, new access roads not required for maintenance will be permanently closed using the most effective and least environmentally damaging methods appropriate to that location with concurrence of the BLM Project Manager (e.g., stock piling and replacing topsoil, or rock replacement). Public access will be controlled through the installation of fences or gates in key locations. This will limit new or improved accessibility into the area.

- With the exception of emergency repair situations, maintenance, and termination activities in areas of critical habitat will be modified or discontinued during sensitive periods (October through March), or as identified by the BLM.
- Should emergency repairs be required in areas of critical Desert Tortoise habitat a certified biologist will accompany construction crews and perform monitoring in accordance with the stipulations outlined under construction (above).
- To determine the effectiveness of perch deterrents, post construction monitoring will be performed as a part of routing maintenance to determine if birds, specifically ravens and raptors, are perching on H-frame towers. Inspections for nesting will be done as part of annual line inspections and maintenance operations. If evidence of nesting on towers is observed by the inspection/maintenance crews, it will be the responsibility of the Project Proponent to notify USFWS with 3 days. The USFWS will in turn notify NDOW and collectively a decision on how to proceed will be determined and implemented (e.g. sending qualified personnel out to remove nests).
- Pesticides for noxious and invasive weed control will not be used in Desert Tortoise Habitat during maintenance activities.

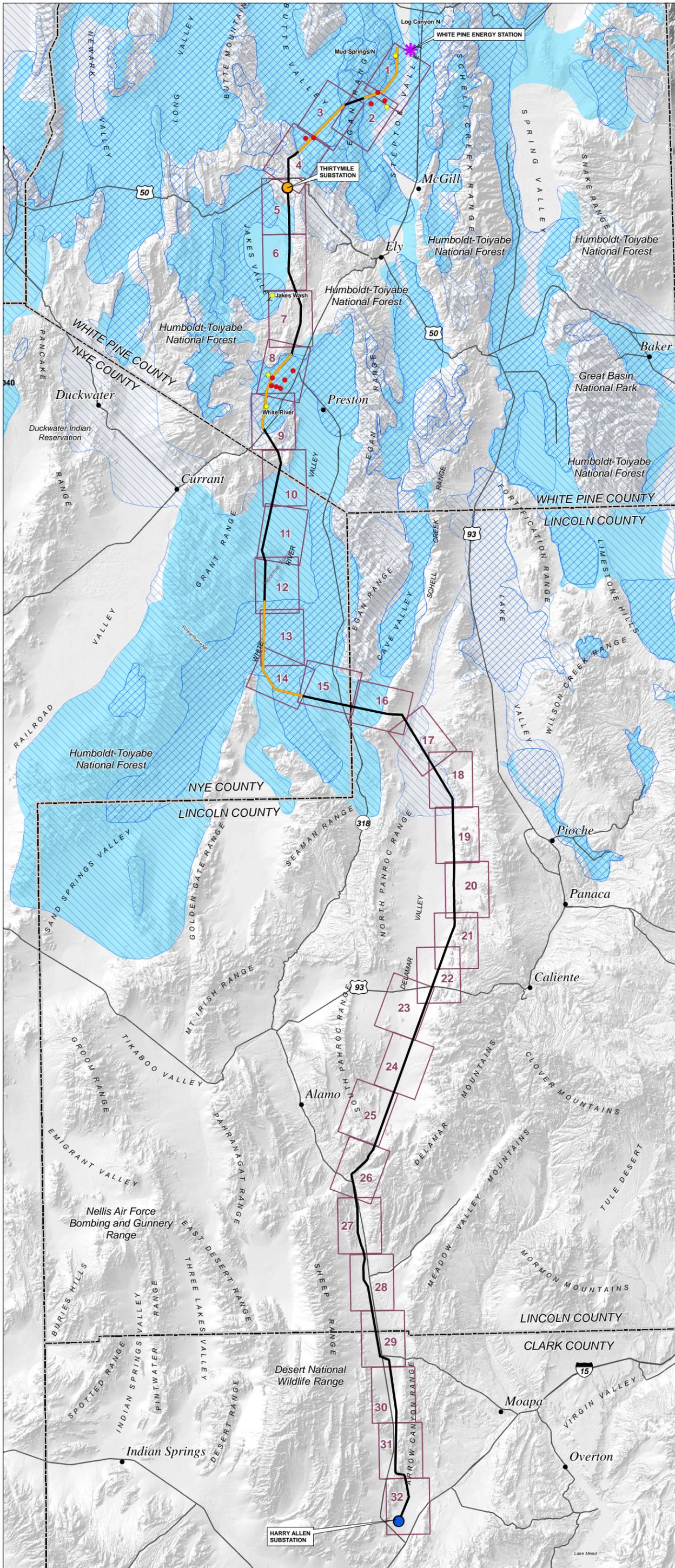
3.2.2 Sage Grouse Leks and Habitat

Background

Greater Sage Grouse Leks are known to be present at several locations in the project areas and the transmission line passes through their summer and winter brooding areas, and nesting areas (Figure B2-2, Sage Grouse Habitat Map). Recent Sage Grouse surveys were conducted by the BLM in the area of the transmission line during the spring of 2006. During the surveys, active and non-active leks were identified that could potentially be affected by construction and operation of the transmission line and ancillary facilities. These lek areas are listed in the following table and also are illustrated on Figure B2-2.

TABE B2-1 GREATER SAGE GROUSE LEK LOCATIONS		
Name	Nearest Transmission Structure	Active
Log Canyon N.	5-6	Yes
Ellison Creek N.	226	Yes
White River	243	Yes
Jakes Wash	170	Yes
Dry Canyon	29	Yes
Dry Canyon 3	37	Unknown/Inactive
South Butte Valley 2	77	Unknown/Inactive
South Butte Valley 3	80	Unknown/Inactive
Runway, Ellison Creek, Ellison Knobs	231	Unknown/Inactive

Inventory of the area identified several inactive or unknown status lek locations which are near Towers 37, 77, 80, and 231. There is potential that these leks could become active at the time of construction. Prior to any ground disturbing construction a biologist will clear the area to ensure that Sage Grouse have not resumed activity in the area.



REGIONAL LOCATION



Key Sage Grouse Areas

- Sage Grouse Leks (Active)
- Sage Grouse Leks (Inactive or Unknown Status)
- Nesting Areas
- Summer Brooding Areas
- Wintering Areas

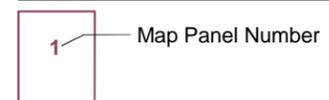
Electrical Transmission Facilities

- SWIP 500kV Transmission Line
- Lattice Structures
- H-Frame Structures
- Proposed White Pine Energy Station
- Proposed Thirtymile Substation
- Harry Allen Substation

General Reference Features

- County Boundary
- Major Transportation

COM Plan Volume II
Map Set 1 - Index



Sources
 USGS, 30 meter Digital Elevation Models
 BLM, Ely Field Office 2006
 Sage Grouse Surveys 2006



SOUTHWEST INTERTIE PROJECT
 500kV Transmission Line
 Southern & Central Portions

Great Basin Transmission, LLC

Sage Grouse Habitat Map

August 2008

Figure B2-2



Concerns

Greater Sage Grouse face many threats throughout their habitat range. Predation, habitat degradation, wildfire, and disturbance/human contact have been identified as the most likely source of potential threats to Sage Grouse from project related activities. Potential impacts to the Greater Sage Grouse from the construction of the transmission line could include loss of nests with eggs or young, loss of nesting habitat, loss of forage and insect prey, and increased potential for colonization by invasive plant species, resulting from ground-disturbing activities associated with clearing of vegetation for construction of access and spur roads, and tower sites. Potential impacts from the operation of the transmission line include new access roads, which could increase public access to areas that support Sage Grouse. Since habitat cannot be avoided due to the size of the habitat area, access roads, spurs, and towers are situated in nesting areas, summer brooding areas, and wintering areas, and the presence of transmission towers could provide additional hunting perches for Sage Grouse predators, particularly Golden Eagles

Wildfire also can be damaging to Sage-Grouse and their habitat. Burnt sage brush habitats require 20 years or more to recover to pre-fire densities, thus seriously degrading Sage-Grouse habitat (Nelle et al. 2000). Once recovered, these areas often result in changed landscapes that are more susceptible to colonization of exotic plants, which over time can cause a conversion.

Mitigation

Generic mitigation measures, applied project wide, will address many of the concerns mentioned above, and selective mitigation measures have been developed in accordance with the Best Management Practices (BMPs) identified by the BLM in the Ely Proposed Resource Management Plan (PRMP). Following is a description of mitigation measures developed in conjunction with BLM and NDOW that have, and will be applied for the Greater Sage Grouse during the design, construction, and operation of project facilities.

Design and Engineering

- Consideration has been given to the use of existing and overland access and minimizing the disturbance associated with the improvement or addition of new access in the layout of facilities to the degree possible. In addition, transmission structures have been located to minimize disturbance to known active leks and Sage Grouse habitat where practicable.
- Modified tower design, including H-frame structures and perch deterrents, will be used in locations within two miles of known active leks and in areas of combined nesting, wintering and summer brooding habitat. Where changes occur at the sagebrush-pinyon juniper interface in Butte Valley and Steptoe Valley, H-frame structures will be utilized beginning two structures before this transition zone is encountered (see Figure B2-2 and COM Plan Volume II, Map Set 2 for the location of these structures).

Construction

- Prior to the initiation of construction activities, all construction personnel will be instructed on the protection of the Greater Sage Grouse and the importance of Greater Sage Grouse habitat. To assist in this effort, the training will address: life history, listing status, applicable state and federal laws, field procedures, and prohibited activities.
- Preconstruction lek surveys, in conjunction with migratory bird surveys will be conducted during the first year of construction between March 1 and May 15. Just prior to construction, a trained biologist will survey potentially affected lek sites (see previous table) to determine if they are active, in accordance with BLM and NDOW protocol.
- No construction will be allowed within 2 miles of an active Sage Grouse Lek from 2 hours before sunrise until 10:00 a.m. from March 1 through May 15. Nesting birds cannot be disturbed from May 1 through June 15. Construction in Greater Sage Grouse wintering grounds is excluded from November 1 through March 31.
- Control of noxious and invasive weeds (see Appendix B3 – Noxious Weed Plant) will not be conducted within ¼ mile of active Sage Grouse Leks during the strutting season (March 1 through May 15), or within ¼ mile of known nesting and brood rearing areas during the nesting season.
- No widening or upgrading of existing access roads as identified in this COM Plan (see Volume II, Map Sets 1 and 2) will be undertaken in the area of construction and operation in critical Sage Grouse habitat, except for repairs necessary to make roads passable without the filing of a project variance and approval by the BLM and the CIC (refer also to Section 4.0 – Deviations During Construction of the COM Plan).
- All movement of construction vehicles outside of the right-of-way will be restricted to pre-designated access, contractor-acquired access, or public roads.
- All construction sites and access roads shall be clearly marked or flagged at the outer limits, prior to the onset of any surface-disturbing activity. All personnel shall be informed that their activities must be confined within the marked or flagged areas.
- Construction and maintenance vehicles will not exceed a speed of 20 miles per hour in areas of Greater Sage Grouse habitat.
- Pets will not be permitted on the transmission line right-of-way during construction.
- Activities will be conducted in accordance with the stipulations identified in Appendix A6 – Fire Protection Plan.

Operation and Maintenance

- In areas of Greater Sage Grouse habitat, new access roads not required for operation and maintenance will be permanently closed. At the appropriate time the BLM, in coordination with the Proponent and other potential users of the utility corridor, will determine which of the newly-constructed access roads will be closed, restored, or

retained. New access roads not required for operation and maintenance of the projects and/or other planned facilities may be closed using the most effective and least environmentally damaging methods appropriate to that area. Where access is to be restored, the practices identified in this COM Plan will be implemented accordingly. This will limit new or improved accessibility into the area.

- With the exception of emergency repair situations, maintenance, and termination activities in areas of active Leks, nesting area, and wintering areas will be modified or discontinued during sensitive periods as previously described, or as identified by the BLM.
- Should emergency repairs be required in areas within proximity to existing and occupied Leks, a certified biologist will accompany construction crews and perform monitoring in accordance with the stipulations outlined under construction (above).
- To determine the effectiveness of perch deterrents, post construction monitoring will be performed as a part of routing maintenance to determine if birds, specifically ravens and raptors, are perching on H-frame towers. Inspections for nesting will be done as part of annual line inspections and maintenance operations. If evidence of nesting on towers is observed by the inspection/maintenance crews, it will be the responsibility of the Project Proponent to notify USFWS with 3 days. The USFWS will in turn notify NDOW and collectively a decision on how to proceed will be determined and implemented (e.g. sending qualified personnel out to remove nests).

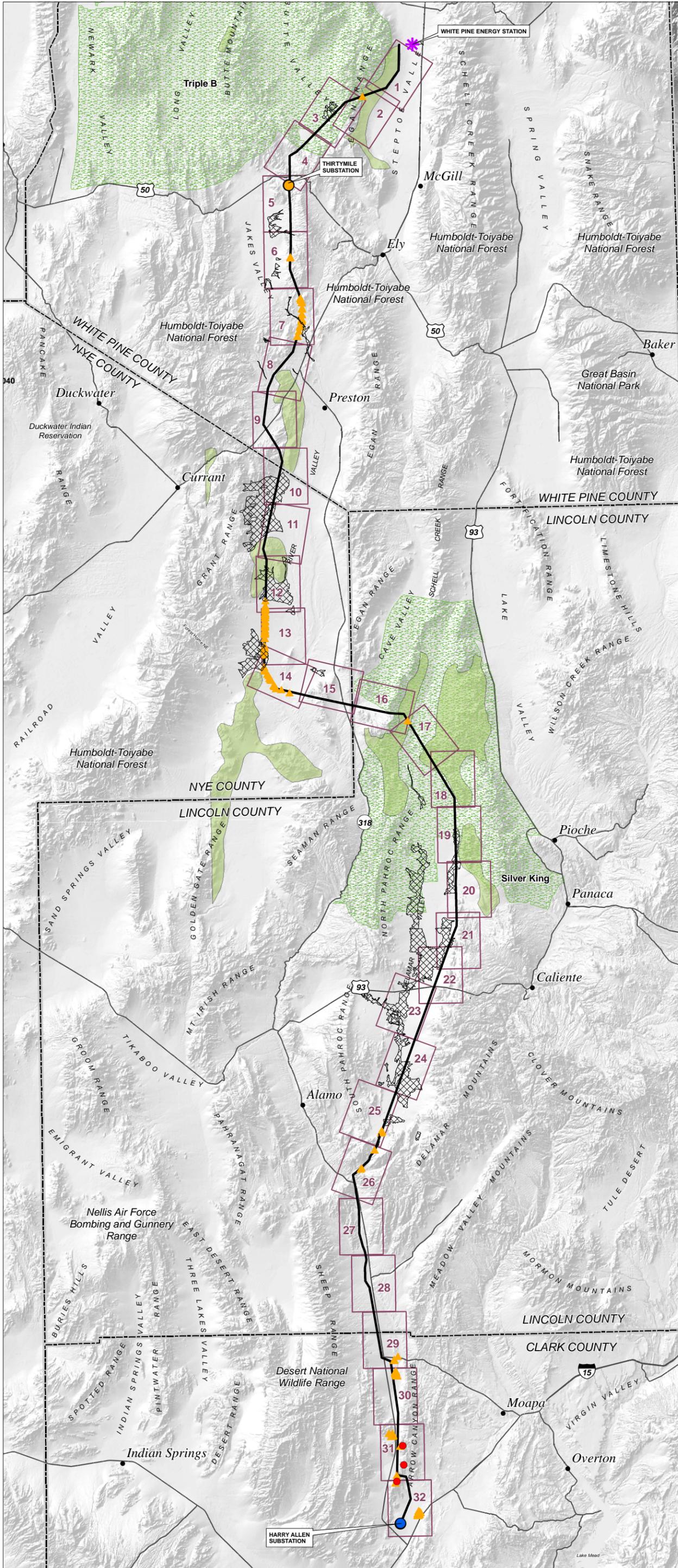
3.2.3 Big Game

Background

Big game animals, identified by the BLM and NDOW, of potential concern include Bighorn Sheep, Elk, Pronghorn Antelope, and Mule Deer.

Bighorn Sheep are likely to be found throughout the numerous mountain ranges in the project areas, specifically; the Egan, Butte, Schell, North Pahroc, Delmar, and Arrow Canyon ranges year-round. While the distribution of Bighorn Sheep may be found throughout the region, areas of concern for the SWIP-Southern Portion are focused on the Arrow Canyon Range north of the Harry Allen Substation.

The northern portions of the transmission line will cross elk range(s) and migration corridors in the vicinity of Silver King Pass; however, no crucial summer elk range will be affected by the projects. Similarly, the transmission line crosses Pronghorn rangeland(s) and migration corridors along State Highway 318 and in the Egan Mountains, but no crucial pronghorn habitat is crossed. Mule Deer occur throughout the majority of the project areas; however, crucial winter Mule Deer habitat is limited to crossings in the Egan, Grant, Schell Creek, and Delmar Mountains (Figure B2-3).



REGIONAL LOCATION



Rare/Sensitive Plants

- ▲ Rare/Sensitive Plant Location

Big Game

Mule Deer

- Crucial Winter Mule Deer Range
- ▨ Winterfat

Desert Bighorn Sheep

- Water Guzzler

Wild Horse

- Herd Management Area

Electrical Transmission Facilities

- SWIP 500kV Transmission Line
- * Proposed White Pine Energy Station
- Proposed Thirtymile Substation
- Harry Allen Substation

General Reference Features

- County Boundary
- Major Transportation

COM Plan Volume II
Map Set 1 - Index

- 1 — Map Panel Number

Sources

- USGS, 30 meter Digital Elevation Models
- Ely RMP July 2005
- Nevada Department of Wildlife 2005
- BLM - Las Vegas Field Office 2005



SOUTHWEST INTERTIE PROJECT
500kV Transmission Line
Southern & Central Portions

Great Basin Transmission, LLC
Other Key Biological
Concerns Map

August 2008

Figure B2-3



Concerns

The primary concerns for big game species and their habitat include habitat degradation, disturbance and human contact. Specific concerns identified by the Las Vegas and Ely BLM Districts are focused on crucial winter Mule Deer range and potential disturbance to Desert Bighorn Sheep in the vicinity of water sources (e.g., guzzlers).

Habitat degradation can occur for a variety of reasons such as fragmentation of high-quality habitat, loss of cover and foraging material due to soil disturbance and subsequent colonization of invasive and noxious weed species, foraging areas bisected by new roads or fences, and increased human and vehicular traffic that create a variety of disturbances degrading the quality of big game habitat. New access roads, the widening of existing roads, and the erection of transmission structures are activities most likely to potentially degrade existing big game habitat.

The most likely causes of disturbance to big game species within the project areas are: an increase of traffic on existing and newly constructed roads and increased noise levels due to construction activities. These increases in human traffic, during and after construction, will present the greatest opportunity for human/wildlife encounters. In addition, wildfire in big game habitat potentially could result in the loss of forage and cover, and new and/or improved access could result in increased public use leading to additional disturbance.

Mitigation

Generic mitigation measures applied project-wide will address many of the concerns previously mentioned, and selective mitigation measures have been developed in accordance with the Best Management Practices (BMPs) identified by the BLM in the Ely PRMP and the Las Vegas Resource Management Plan (RMP). Following is a description of mitigation measures developed in conjunction with BLM and NDOW that have been applied for big game species and their habitat during the design, construction, and operation of project facilities.

Design and Engineering

- Consideration has been given to the use of existing and overland access and minimizing the disturbance associated with the improvement or addition of new access in the layout of facilities, to the degree possible. In addition, transmission structures have been located to minimize disturbance to habitat where practicable, including disturbance to wildlife water sources (i.e., guzzlers) and providing a ¼-mile buffer area where access or construction activities will not occur (see Figure B2-3 and COM Plan Volume II, Map Set 1).

Construction

- Prior to the initiation of construction activities, all construction personnel will be instructed on the protection of big game species and their habitat. To assist in this effort, the training will address applicable state and federal laws, field procedures, and prohibited activities.

- No construction activity will be allowed within areas of crucial Mule Deer winter range from November 1 to April 15 (see Figure B2-3 and COM Plan Volume II, Map Sets 1 and 2).
- No widening or upgrading of existing access roads as identified in this COM Plan (see Volume II, Map Sets 1 and 2) will be undertaken in the area of construction and operation in areas of crucial or critical big game habitat, except for repairs necessary to make roads passable without the filing of a project variance and approval by the BLM and the CIC. Refer also to Section 4.0 – Deviations During Construction of the COM Plan.
- All movement of construction vehicles outside of the right-of-way will be restricted to pre-designated access, contractor-acquired access, or public roads.
- All construction sites and access roads shall be clearly marked or flagged at the outer limits prior to the onset of any surface-disturbing activity. All personnel shall be informed that their activities must be confined within the marked or flagged areas.
- Construction and maintenance vehicles will not exceed a speed of 20 miles per hour.
- If Bighorn Sheep are encountered in the immediate vicinity of construction activities, NDOW will be immediately notified to determine what, if any action is required.
- Personnel will not be allowed to keep or have pets on the transmission line right-of-way during construction.
- Activities will be conducted in accordance with the stipulations identified in Appendix A6 – Fire Protection Plan.

Operation and Maintenance

- In areas of crucial winter Mule Deer habitat, new access roads not required for operation and maintenance will be permanently closed in selective areas. At the appropriate time the BLM, in coordination with the Proponent and other potential users of the utility corridor, will determine which of the newly-constructed access roads will be closed, restored, or retained. New access roads not required for operation and maintenance of the projects and/or other planned facilities may be closed using the most effective and least environmentally damaging methods appropriate to that area. Where access is to be restored, the practices identified in this COM Plan will be implemented accordingly. This will limit new or improved accessibility into the area.
- With the exception of emergency repair situations, maintenance and termination activities in crucial winter range areas for Mule Deer will be modified or discontinued during sensitive periods (November 1 through April 15), or as identified by the BLM.

3.2.4 Migratory Birds

Background

Migratory birds may be found seasonally throughout the project areas, and the transmission line will pass through a variety of suitable habitats that could attract the presence of migratory bird species.

As presented in Section 2.3 of this BPP, the MBTA makes it unlawful to pursue, hunt, take, capture, kill, bait, poison, or possess any migratory bird, or part, nest, or egg of such bird, listed in wildlife protection treaties. With respect to the transmission line, the MBTA applies primarily to those bird species that may be affected during construction. In this regard, compliance with the MBTA will require surveying for, and delineating non-disturbance buffers for nesting birds during the breeding season that will be adhered to. Active nests that cannot be avoided during construction will be salvaged by a state-licensed and approved rehabilitation expert.

Concerns

The primary concern for migratory birds is mortality of eggs or young as a result of disturbance and human contact (primarily associated with ground clearing and ground disturbance within construction areas). These activities could disturb migratory birds during critical breeding and nesting periods, potentially resulting in the loss of nests, eggs, or young.

Another concern regarding migratory birds is the potential for collision with transmission conductors or, more likely, the fiber-optic shield wire in areas that may serve as migration corridors. In particular, potential areas of concern include the White River Valley (where the transmission line is located to the south of the Wayne Kirsch Wildlife Management Area, and at the crossing of the Egan Range from Steptoe Valley into Butte Valley).

Mitigation

Mitigation measures to address migratory birds, and meet the requirements of the MBTA have been developed in accordance with the BMPs identified by the BLM in the Ely PRMP and Las Vegas RMP, and through discussions with BLM and NDOW. Following is a description of required mitigation measures developed to minimize impacts to migratory birds during the design, construction, and operation of project facilities.

Design and Engineering

- Consideration has been given to the use of existing and overland access and minimizing the disturbance associated with the improvement or addition of new access in the layout of facilities to the degree possible. In addition, transmission structures have been located to minimize disturbance to migratory bird habitat where practicable, including the crossings of perennial and intermittent drainages and migratory corridors (e.g., White River).

- In order to reduce the potential for migratory bird (e.g., waterfowl and raptors) collisions with transmission lines, portions of the transmission line have been designed to include flight deterrent devices that will be attached to the fiber optic shield wire in key areas as identified in the table below and illustrated in Figure B2-3 and COM Plan Volume II, Map Sets 1 and 2. If prior to construction it is determined by the BLM that additional areas require flight diverters these areas will be added to the mitigation requirements.

TABLE B2-2 FLIGHT DIVERTER PLACEMENT	
General Location	Tower Numbers
White River Valley (south of Wayne Kirsch WMA)	404 - 405
Egan Range	28-56

Construction

- Prior to the initiation of construction activities, all construction personnel will be instructed on the protection of migratory birds. To assist in this effort, the training will address the MBTA and all applicable state laws, field procedures, and prohibited activities.
- A biological monitor will be present on the project rights-of-way during the migratory bird nesting season (April 1 through August 31).
- Prior to any ground-disturbing construction activity, the biological monitor will survey and inspect the potentially affected area(s) for nests or breeding birds.
- In the event a nest or breeding pair is discovered, the area will be flagged and a buffer zone around each nest will be flagged to keep construction personnel and equipment away for a pre-determined time as identified by the BLM Project Manager.
- Pets will not be permitted on the transmission line right-of-way during construction.
- Activities will be conducted in accordance with the stipulations identified in Appendix A6 – Fire Protection Plan.

Operation and Maintenance

- Bird flight diverters are to be maintained and monitored during the operation of the transmission line, and as a part of regular maintenance and inspection activities. Any problems with flight diverters, areas where flight diverters do not appear to be effective, or new areas where flight diverters might be deemed useful, will be reported to the BLM

3.2.5 Rare Plants

Background

As a part of preconstruction studies and surveys a list of potential rare plant species that could occur in the project areas was prepared by analyzing habitat affinity data, and geographical information regarding rare plant species in Nevada. Of those potentially occurring in the project areas, no federally listed Threatened or Endangered Species were identified. However, a select number of plants were identified that qualified as Critically Endangered by the state, or are considered either sensitive, or of special status by the BLM.

Rare plant surveys, conducted between May 5 and July 24, 2006 resulted in the identification of 63 rare plant locations along the transmission line alignment. The types of plants identified during these surveys and their location, are presented in the following table, and illustrated in Figure B2-3 and COM Plan Volume II, Map Sets 1 and 2.

TABLE B2-3 KNOWN RARE PLANT LOCATIONS		
Species	Tower Numbers	Number of Locations
<i>Arenaria stenomeris</i>	950	1
<i>Asclepias uncialis ssp. ruthiae</i>	396-400	2
<i>Cryptantha welshii</i>	179-182, 185, 188, 191-192, 195-196, 198, 201, 354, 356-373, 377-382, 388-390, 393, 396, 399-402, 405, 410	54
<i>Lepidium nanum</i>	395	1
<i>Lewisia maguirei</i>	154-155	2
<i>Linum pratense</i>	743-744	1
<i>Machaeranthera grindelioides var. depressa</i>	191	2
<i>Mirabilis pudica</i>	711-712, 722	3
<i>Silene nachlingerae</i>	42	1

Concerns

The primary concerns for rare plant species, with respect to the transmission line, are habitat degradation, the risk of wildfire, and disturbance resulting from construction activities associated with project facilities and the potential for increased public access.

Degradation can occur from fragmentation in areas of high-quality habitat. New access roads, the widening and maintenance of existing roads, and construction and placement of transmission structures are the activities most likely to affect existing rare plant habitat. These activities can result in the loss of cover (protective species) and resources (e.g., water and soil) due to soil disturbance, as well as the potential subsequent colonization of invasive and noxious weed species. Wildfires resulting from construction activities also may result in the loss of cover, resources, or individual plants.

Mitigation

Generic mitigation measures, applied project wide, will address many of the concerns associated with rare plants, and selective mitigation measures also have been developed in

accordance with BMPs identified by the BLM. Following is a description of required mitigation measures developed in conjunction with BLM to address rare plant species and their habitat during the design, construction, and operation of project facilities.

Design and Engineering

- Consideration has been given to the use of existing and overland access, and minimizing the disturbance associated with the improvement or addition of new access in the layout of facilities to the degree possible. In addition, transmission structures have been located to minimize disturbance to known sensitive plant locations where practicable.

Construction

- Prior to the initiation of construction activities, all construction personnel will be instructed on the protection of rare plants. To assist in this effort, the training will address the rare plants that may occur within the project areas, and the state laws, and field procedures designed to protect rare plants.
- No widening or upgrading of existing access roads as identified in this COM Plan (see Volume II, Map Sets 1 and 2) will be undertaken in the area of construction and operation in areas of rare plant occurrences, except for repairs necessary to make roads passable without the filing of a project variance and approval by the BLM and the CIC (refer also to Section 4.0 – Deviations During Construction of the COM Plan).
- All movement of construction vehicles outside of the right-of-way will be restricted to pre-designated access, contractor-acquired access, or public roads.
- All construction sites and access roads shall be clearly marked or flagged at the outer limits prior to the onset of any surface-disturbing activity. All personnel shall be informed that their activities must be confined within the marked or flagged areas.
- Prior to ground disturbing activities, in areas specified by the BLM Project Mmanager, a biological monitor will survey and inspect the area for rare plants and in the event of a new discovery will flag and establish a construction restriction buffer.
- Activities will be conducted in accordance with the stipulations identified in Appendix A6 – Fire Protection Plan.

Operation and Maintenance

- In areas where sensitive and rare plants may be affected, new access roads not required for operation and maintenance will be permanently closed in selective areas. At the appropriate time the BLM, in coordination with the Proponent and other potential users of the utility corridor, will determine which of the newly-constructed access roads will be closed, restored, or retained. New access roads not required for operation and maintenance of the projects and/or other planned facilities may be closed using the most

effective and least environmentally damaging methods appropriate to that area. Where access is to be restored, the practices identified in this COM Plan will be implemented accordingly. This will limit new or improved accessibility into the area.

- Post-construction monitoring of rare plant populations that could be affected by the operation and maintenance of the transmission line will be monitored in conjunction with noxious weeds in predetermined areas and as a part of routine maintenance. The schedule and frequency of these monitoring efforts will be determined by the BLM.

3.2.6 Other Sensitive Species

Background

In addition to the key biological resource concerns previously described, the BA (Appendix A) identifies additional wildlife and plant species that potentially could occur within the project areas. The species listed in Table A-1 of the BA include those species considered to be Nevada State Protected Species and/or Nevada BLM Protected Species, which were found to have a high probability for occurrence within the project areas.

Concerns and Mitigation

The project-related concerns, with respect to these species, includes the potential for impacts based on habitat degradation and disturbance, increased potential for wildfires, and human contact. The generic and selective mitigation measures presented in Section 6 of the COM Plan, along with those identified in other sections of the COM Plan Appendices, are to be implemented under the guidance of the BLM Project Manager and the CIC, as appropriate, and will assist in minimizing the affects to these sensitive species during the construction and operation of the transmission line and substation facilities.