

SECTION 6.0 POLICY AND RESOURCE UPDATES

6.1 INTRODUCTION

This section of the EA contains updates on the environmental setting of the SWIP – Southern Portion. These updates are based on key policy and/or resource changes that have occurred following the approval of the SWIP Final EIS, the ROD, and ROW Grant(s), including information associated with the following topics:

- Designated Critical Habitat for the Mojave Desert Tortoise
- Sage Grouse
- Migratory Birds
- Noxious and Invasive Weeds
- Environmental Justice
- VRM Classifications
- Cultural Resources
- Tribal Consultation
- Threatened and Endangered Species, Sensitive Species
- Clark County Ozone Non-Attainment

Following is an overview of the affected environment and environmental consequences regarding each of these topics (as appropriate). Additional information in support of this discussion may also be found in the SWIP – Southern Portion BA, BO and COM Plan.

6.2 DESIGNATED CRITICAL HABITAT FOR THE MOJAVE DESERT TORTOISE

6.2.1 Affected Environment

The USFWS designated Critical Habitat for the Mojave Desert Tortoise on February 8, 1994, including specific areas in California, Arizona, and Nevada, which are crucial to the recovery of the species. The final rule for the designation identified four units totaling 1.2 million acres in Nevada, where the majority of the Mojave Desert Tortoise habitat is managed by the BLM, under the Clark County MFP. The designation of Critical Habitat occurred shortly before approval of the SWIP ROD and ROW Grant, and biological opinions were prepared that evaluated the project's effect both on tortoises and their Critical Habitat. An updated BA was submitted to the USFWS in July 2007 and a BO, including an Incidental Take Statement, was issued by USFWS on December 20, 2007. The BO concluded that the SWIP is not likely to jeopardize the continued existence of the threatened desert tortoise (Mojave population). Within areas crossed by the transmission line, Critical Habitat is present in Clark County along both sides of U.S. Highway 93, extending from just north of Dry Lake to the Pahranaagat Wash, in Lincoln County.

The BLM in the Southern Nevada District has prepared an RMP designating ACECs for Desert Tortoises, and, under the protection of the ACEC, certain activities are restricted in those areas. Along the transmission line ROW, the BLM has designated the Coyote Springs ACEC.

In July 2006, updated surveys were completed along the ROW, from the Harry Allen Substation, to a point just south of Delamar Lake, a distance of approximately 65 miles. Using a triangular transect method a total of 43.5 miles of transects were walked. Tortoises or sign thereof were found on nine of the transects. Two live tortoises were encountered, both on the same transect and both were in burrows. Otherwise, a total of 32 other observations of sign were tallied in this area.

6.2.2 Environmental Consequences

Direct impacts to designated Mojave Desert Tortoise habitat would result primarily from ground-disturbing construction activities. Impacts will be either temporary (short-term) or permanent (long-term) and they will occur within approximately 37.5 miles of USFWS Critical Habitat, and approximately 19.4 miles of the Coyote Springs ACEC that are crossed by the transmission line. The permanent and short-term disturbances would result in loss of vegetation, and therefore reduce the amount of forage available to tortoises. Table 6-1 includes disturbance areas for USFWS Critical Habitat and BLM ACECs. The disturbance is associated with access roads, tower sites, lay down sites, and pulling and tensioning stations. Permanent disturbances are largely associated with access roads.

| Disturbance Type | USFWS Designated Critical Habitat | BLM ACECs |
|-------------------------|--|-----------------------|
| | | Coyote Springs |
| Temporary | 238 | 126 |
| Permanent | 122 | 57 |
| Total Disturbance | 360 | 220 |

Activities associated with project construction could potentially injure or kill tortoises, and vehicles that stray from construction areas and roads may crush Mojave Desert Tortoises above ground or in their burrows. Tortoises also may be affected by removal from construction areas. In addition, they may be killed or injured by vehicles resulting from increased accessibility of the area during and after construction of the transmission line. Other potential impacts from the operation of the transmission line include the increase in accessibility from new access road construction, resulting in increased illegal collection of tortoises found along or near the roadways. The presence of transmission structures may allow for increased avian predation of Mojave Desert Tortoises by providing perches and nesting sites.

Mitigation measures designed specifically to avoid and reduce impacts to the Mojave Desert Tortoise have been developed as a part of the formal Endangered Species Act consultation and are reflected in the BO. Many of the measures duplicate those developed in the 1992 Draft EIS and previous BA/BO; however, other measures have been designed specifically to reduce or eliminate incidental take of tortoises. Examples include the use of steel, H-frame structures with perch deterrents at selective locations south of State Route 168 in the Coyote Springs ACEC, per agreement with BLM, habitat conservation, educational programs, guidelines for handling, holding, or relocating tortoises, assigning speed limits to construction sites, and monitoring towers for active nest sites, as well as numerous other measures identified in the SWIP – Southern Portion BA, BO and COM Plan. Compensation for the loss of Desert Tortoise habitat is required by applicable endangered species laws, regulations, and agency policies, including the BLM Desert Tortoise protection policies, and will be applied to the SWIP – Southern Portion. The decision regarding the distribution and appropriate use of mitigation remuneration for the

disturbance of Desert Tortoise habitat has been determined through consultations between the USFWS and BLM and is reflected in the stipulations and the terms and conditions contained in the BO. The BO is presented in Appendix B of the EA.

6.3 SAGE GROUSE

6.3.1 Affected Environment

Greater Sage Grouse leks are known to be present at several locations along the route of the SWIP – Southern Portion. Updated Sage Grouse surveys were conducted for the SWIP – Southern Portion and for the proposed ROW modifications during the spring of 2006. During the surveys, 69 males were observed in the Butte/Buck/White Pine Population Management Unit, including 16 males in the White River Valley Complex, and 53 males in the West Schell Complex. Two known active leks were located within 2 miles of the SWIP – Southern Portion.

6.3.2 Environmental Consequences

Impacts to the Greater Sage Grouse from the construction of the transmission line could include the potential 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. Access roads, spurs and towers would be placed in wintering grounds, and towers could provide additional hunting perches for Sage Grouse predators, particularly Golden Eagles.

Mitigation measures that have been identified to reduce the potential effects to Sage Grouse include the modification of the location of the transmission line and the use of steel H-frame structures (including perch deterrents) in selective locations as agreed upon with the BLM and Nevada Department of Wildlife. Additional measures to mitigate impacts during construction include limiting long and short-term access, seasonal timing of construction, and the presence of Biological Monitors during construction activities. These measures are described in greater detail in the SWIP – Southern Portion COM Plan.

6.4 MIGRATORY BIRDS

6.4.1 Affected Environment

The MBTA is the domestic law that affirms or implements, the United States' commitment to the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. The take of all migratory birds is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent over-utilization. The MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any migratory bird, its eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11).

Virtually all of the bird species found within the SWIP transmission line ROW are protected by the MBTA.

6.4.2 Environmental Consequences

Potential impacts to migratory birds from the construction and operation of the transmission line are primarily associated with the potential for clearing and ground disturbance during critical breeding and nesting periods, which could result in the loss of bird nests, eggs, or young. Adult birds are normally able to avoid construction equipment, however, eggs or young in nests cannot. Other impacts to migratory birds include the potential for collision with transmission conductors or, more likely, the fiber optic shield wire (particularly along waterways, while limited, that may serve as migration corridors).

As stipulated in the COM Plan, mitigation measures, including the presence of a biological monitor during the migratory bird nesting season, will reduce these impacts. During construction, active nests that could potentially be affected will be identified, and a buffer zone around each nest will be flagged to keep personnel and equipment away from sensitive areas. In order to reduce the potential for collisions with migratory birds and, in particular with waterfowl and raptors, flight deterrent devices will be employed in key areas, as specified in the COM Plan.

6.5 NOXIOUS WEEDS AND INVASIVE SPECIES

6.5.1 Affected Environment

Noxious weeds are invasive, non-native species that tend to spread rapidly and often displace native plant species or bring about changes in species composition, community structure, and ecological function. Noxious weeds may compete with native species for critical resources including water, nutrients, and space. Such competition may alter the dynamics of the native plant community, potentially leading to a monoculture of the noxious species. Noxious weeds also may alter soil chemistry in such a manner as to preclude germination or seedling establishment by native species. Moreover, noxious weeds tend to thrive in disturbed areas, such as at electrical transmission tower sites, laydown areas, storage yards, and pulling and tensioning sites. Noxious weeds are formerly listed and managed by the Nevada Department of Agriculture.

The noxious weed inventory for the SWIP – Southern Portion included (1) the identification of weed species that are designated noxious, as defined by the Nevada Department of Agriculture, and which have the potential to occur within the area affected by the project; and (2) the gathering of information to identify specific noxious weed populations in the project area, including preconstruction surveys along the project ROW. These surveys were conducted from April through June 2006 by Tri County Weed, as recommended by the BLM, Ely District Office.

A complete listing of the noxious weeds identified through these surveys is presented in Table 6-2. In addition, information on noxious weed occurrences within the ROW area, including the location and extent of infestations, was also gathered from the BLM, Ely District Office in the form of a GIS data layer. This inventory did not indicate any additional noxious weed species located within the project corridor, however, it is likely that populations of other noxious species

that were not found within the survey area may occur in the vicinity, and these species could become established in disturbed areas on the ROW following construction.

| Species | Common Name | Number of Locations |
|------------------------------|--------------------|----------------------------|
| <i>Acroptilon repens</i> | Russian knapweed | 1 |
| <i>Brassica tournefortii</i> | Sahara mustard | 1 |
| <i>Cirsium vulgare</i> | Bull thistle | 4 |
| <i>Tamarix ssp.</i> | Salt cedar | 5 |

Red brome (*Bromus rubens*), cheatgrass (*Bromus testorum*), and Chilean chess (*Bromus trinitii*) have been identified by the BLM as invasive species of concern. In conjunction with the noxious weed and rare plant surveys conducted for the SWIP – Southern Portion, the identification of invasive species in addition to the noxious weeds identified in Table 6-2 was generally noted. These were often located in association with existing access roads and other previously disturbed areas in the vicinity of the transmission line where evident. Based on the arid conditions that were encountered during these surveys, many of the anticipated invasive species may not have been identified.

6.5.2 Environmental Consequences

The introduction and spread of invasive and nonnative plant species (including noxious weeds) contributes to the loss of rangeland productivity, increased soil erosion, reduced species and structural diversity, loss of wildlife habitat, and, in some instances, may pose a threat to human health and welfare. The Carlson-Foley Act (Public Law 90-583) and the Federal Noxious Weed Act (Public Law 93-629) direct weed control on public land. Executive Order 13112, Invasive Species, was authorized to prevent the introduction of invasive species, provide for their control, and to minimize the impacts caused by these species. NRS 555, Control of Insects, Pests, and Noxious Weeds, provides information regarding the designation and eradication of, and inspection for, noxious weeds within the state of Nevada (Ely PRMP/EIS).

Construction of the transmission line and substation will require new access roads resulting in disturbance at the substation site, tower pad sites and pulling and tensioning areas. Berms created by access road construction can represent disturbed soils, which may provide suitable habitat for noxious weeds including those listed in Table 6-2 and other invasive species previously described. Construction activity, including movement of heavy equipment and light trucks, also may disturb soil and provide weed habitat. Seeds of noxious weeds and invasive species also may be present in the seed bank and soil disturbance can have the effect of “releasing” these seeds possibly leading to local infestations. There also is the potential for weeds to be introduced into the project area by construction vehicles.

Based on the results of the noxious weed survey, and from information provided by the BLM, a noxious weed risk assessment was completed for the project indicating that the construction of the SWIP – Southern Portion represents a low to moderate level of risk (BLM Noxious Weed Risk Assessment, 2-8-07). Under a “moderate” designation control measures are important to prevent the spread of noxious weeds on disturbed sites, preventative management measures are required to reduce the risk of introduction or spread of noxious weeds into the area, and monitoring is required for up to three consecutive years to provide for control of newly

established populations of noxious weeds and follow-up treatments for previously treated infestations.

A comprehensive Noxious Weed Management Plan (part of the COM Plan) has been developed with the goal of keeping the ROW free from noxious weeds. Adherence to the specific weed control mitigation measures in this plan, including measures identified in the Las Vegas BLM Noxious Weed Plan, will minimize the introduction and spread of noxious and invasive weeds during and following construction of the SWIP – Southern Portion. Early detection and rapid response have been important considerations in the development of this plan which includes (1) identification of problem areas, (2) preventative measures that will be implemented to prevent the spread of these and other noxious weeds during construction, (3) treatment methods during construction and post-construction, and (4) reclamation and post-construction monitoring. Included in this plan are specific measures that address the eradication of existing noxious weed populations, measures to minimize the potential for the spread of noxious weeds through off-site power washing of equipment/vehicles and on-site cleaning of equipment/vehicles with compressed air, and the use of weed free materials during restoration (e.g., hay or straw). The application and use of pesticides for the control of noxious weeds is also addressed in this plan, including daily reporting requirements. Pesticide use reports shall include details such as treatment rate, approximate acreage treated, target species, and weather conditions on the day of the treatment.

In addition, as a part of the ROW Preparation, Rehabilitation, and Restoration Plan (included in the COM Plan), reseeding practices and seeding mixtures to be used in areas of temporary disturbance will be coordinated with a BLM Botanist in order to determine the source type and quantity of seed mixtures and seeding locations. In this regard, mixtures that discourage the establishment of invasive and noxious weeds will be considered, as appropriate.

Follow-up long-term monitoring is an important measure to prevent the further spread of any populations of noxious weeds in the project ROW. Weed monitoring will be conducted per the monitoring schedule, and as prescribed in the Noxious Weed Management Plan as approved by BLM.

The construction contractor and/or owner will implement noxious weed controls measures in accordance with existing regulations, BLM requirements, and as specified in the Noxious Weed Management Plan.

6.6 ENVIRONMENTAL JUSTICE

6.6.1 Affected Environment and Environmental Consequences

As designated by Executive Order 12898 of February 11, 1997, all federal actions must address and identify as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States. The criterion for a finding of possible environmental justice issues is the occurrence of more than 50 percent of the population being minority or low-income in the proposed project area of influence.

The SWIP – Southern Portion is located within a sparsely to unpopulated area, and the Coyote Springs development is expected to be a master-planned community; therefore there are no

current or expected occurrences of disproportionately high percentages of low-income populations who might be impacted from the proposed project.

6.7 VISUAL RESOURCE MANAGEMENT CLASSIFICATIONS

6.7.1 Affected Environment

Revisions to the VRM designations within the Southern Nevada District Office have occurred since the approval of the SWIP Final EIS and ROD (1994), including portions of the Coyote Spring Valley and Harry Allen Substation areas that have been modified from a VRM Class IV (allowing for major modification) to a Class III (partial retention).

6.7.2 Environmental Consequences

The effects of the revisions to the VRM designations within the Southern Nevada District are described in Section 3.6.1 and consistency with the revised designation is assessed in Section 4.7.1 for the ROW Extension to the Harry Allen Substation, and in Sections 5.2.5 and 5.3.5 for the Coyote Springs Realignment. In these and other areas in the Southern Nevada District, mitigation measures, including the use of dulled metal steel structures and non-specular conductors, will reduce visual impacts and allow for conformance with these VRM objectives.

6.8 CULTURAL RESOURCES

Cultural resource surveys have been conducted for the length of the SWIP – Southern Portion and are being documented in a cultural inventory survey report. An HPTP is also being prepared for the project. These documents will be submitted to the SHPO and BLM, and appropriate mitigation measures will be included in the COM Plan.

6.9 TRIBAL CONSULTATION

While the transmission line does not cross any Native American Reservations, the BLM has, and will continue to address NHPA Section 106 Consultation, including consultation with potentially affected Native American Tribes, per the Executive Order on Tribal Consultation. This consultation will include consideration for the extension to Harry Allen, Coyote Springs Realignment, and the Thirtymile Substation Realignment.

6.10 THREATENED AND ENDANGERED SPECIES/SENSITIVE SPECIES

6.10.1 Affected Environment

As described in the SWIP BA and BO, federally designated threatened and endangered species that could be affected by the project include the Bald Eagle, the Southwest Willow Flycatcher, and the Mojave Desert Tortoise (as previously described). In addition, there are several special status species that possess a level of protection or concern in the State of Nevada that could potentially be found in the project area. Both the threatened and endangered species and

sensitive species are discussed in detail in the SWIP BA (T&E Species), and the appendix to the BA (Non-Listed Sensitive Species).

6.10.2 Environmental Consequences

Direct and indirect effects identified for the threatened and endangered species, exclusive of the Desert Tortoise, are anticipated to range from minimal to non-existent. Concerns associated with effects to other sensitive species would primarily be related to vegetation clearing and ground disturbance during the construction of project facilities. The locations of sensitive species (e.g., Las Vegas Valley buckwheat and three-cornered milkvetch) are presented in the COM Plan. Mitigation measures including selective tower placement, the use of alternative tower types, seasonal timing of construction, limiting ground disturbance and permanent access, and compliance with the Flagging, Fencing, and Signage Plan (incorporated as part of the COM Plan), will help reduce potential impacts to sensitive species, as described in the SWIP – Southern Portion BA, BO and COM Plan.

6.11 CLARK COUNTY OZONE NON-ATTAINMENT

6.11.1 Affected Environment

The EPA has established National Ambient Air Quality Standards for certain pollutants. The attainment status for the proposed project area was examined in consideration of federal designations contained in 40 CFR §81.329. The SWIP – Southern Portion crosses two hydrologic basins in Clark County which the EPA has classified as non-attainment for the eight-hour ozone standard. These include basin number 216 (Garnet Valley [Dry Lake]) and basin number 217 (Hidden Valley [North]).

The Clark County Department of Air Quality and Environmental Management administers the surface area disturbance permitting for Clark County through the issuance of a Dust Control Permit. A Dust Control Permit is required for projects that are greater than or equal to 0.25 acres; require trenches equal to or greater than 100 feet in length; or include the mechanical demolition of any structure larger than or equal to 1,000 square feet (Air Sciences Inc., 2007).

6.11.2 Environmental Consequences

Impacts to air quality would primarily be short-term as a result of the construction and operation and maintenance activities of the transmission line. The construction of the facilities would produce two types of air pollution: fugitive dust from soil disturbance and exhaust emissions from construction vehicles and equipment. No impacts to ozone levels in the non-attainment areas are expected as there will be insignificant quantities of volatile organic compounds and oxides of nitrogen (the precursors to ozone) emitted from construction vehicles and equipment.

A construction plan, including a schedule and the number and type of vehicles to be used during construction of the transmission line, is included in the COM Plan. Emissions from construction vehicles are not expected to exceed air quality standards. Construction/maintenance activities will comply with the policies identified by Clark County (e.g., Dust Control Permit), the BAPC, and the BLM. Dust and emission control mitigation measures (including watering roads),

mitigation measures limiting disturbance, and restoration and monitoring practices described in the COM Plan will further assist in reducing impacts to air quality.