

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

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**Environmental Assessment  
NV-045-08-006-EA  
February 10, 2009**

**Kemp Communications- Mormon Mountain**

***Location:* Mormon Mountains  
Township 11 South, Range 66 East, MDMB  
Section 24: SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>  
Lincoln County, Nevada.**

***Applicant/Address:* Kemp Communications  
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## **1.0 INTRODUCTION**

In March 2008, Kemp Communications submitted an application for a solar powered FM communication facility in Lincoln County, near Mormon Mountain to the Bureau of Land Management (BLM). The proposed location is adjacent to existing facilities, which are too small to co-locate on, at the Mormon Mesa Communication (Comm) Site (N-43405).

The proposed location is on the southwest edge of the Mormon Mountains, east of U.S. Highway 93, in the southeast portion of Lincoln County, Nevada (Appendix A Figure 1). This site was selected based on Federal Communication Commission (FCC) permitting requirements, proximity to the target broadcasting area, and avoidance of lands within the Mormon Mountain Wilderness Area and the Mormon Mesa Area of Critical Concern (ACEC).

### **1.1 PROPOSED ACTION TITLE/TYPE:**

The proposed action consists of approving a proposed 500 feet tall FM tower with a 32ft. x 32ft. x 32ft. base, solar facilities, and issuance a communication site type Right-of-Way (ROW). The ROW would be granted on an irregular polygon shaped parcel with a length of approximately 478 feet and a variable width of approximately 150 feet on the north end which tapers to 0 feet at the southwestern most point (1.25 acres).

#### **1.1.1 Location of Proposed Action:**

Township 11 South, Range 66 East, MDMB.

Section 24: SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>

These areas are depicted on a map in Appendix A.

#### **1.1.2 Existing NEPA Documentation:**

Ely Resource Management Plan (RMP), Final Environmental Impact Statement (FEIS) 2007; Record of Decision (ROD) signed August 20, 2008.

#### **1.1.3 Applicant:**

Kemp Communication

#### **1.1.4 Conformance with Applicable Land Use Plans:**

This proposed action is in conformance with the Ely RMP FEIS 2007, ROD signed August 20, 2008. We have reviewed the RMP and the proposed action conforms with land use plan decision *L-35 under the authority of section 302 of the Federal Land Policy and Management Act of October 21, 1976 (FLPMA), as amended (43 U.S.C. 1732 et. seq.)*. Additionally, we have reviewed the Lincoln County Master Plan and the proposed project is in conformance with Policy ED-1A.

### **1.2 NEED FOR PROPOSED ACTION:**

The purpose of the proposed action is to provide additional self sufficient FM broadcasting facilities to meet area public needs. Due to existing land management

uses/designations (i.e. Wilderness) and remoteness from existing facilities, there is a lack of coverage for certain bandwidths/ frequencies in the area. The proposed facilities would serve to implement the broadcasting of the FCC approved bandwidth/ frequently of 106.9 FM at 100,000 watts.

## **2.0 PROPOSED ACTION AND ALTERNATIVES**

### **2.1 DESCRIPTION OF PROPOSED ACTION:**

The proposed action consists of installing a tower, building, and solar panel arrays on an irregular shaped parcel. The parcel is approximately 478 feet long with a variable width that tapers from approximately 150 feet on the northeast end to 0 feet at its southwest most point (1.25 acres).

The free standing tower would be approximately 500 ft tall and made of triangular steel lattice. The base of the tower would be approximately 32 feet on each of the three sides with each of the three legs secured by drilling in rock bolts. The steel lattice design and rock bolt anchors are designed to withstand the expected wind loading.

The building would be approximately 26ft. x 26ft. and would be used to house operational equipment and batteries, with solar panels placed on the roof. The uneven terrain, lack of soil, and difficult access make it impractical to site the building on concrete slabs. Therefore the building would be placed on a raised steel platform which would be anchored into the rock.

Three free standing solar power arrays (approx. 42ft x 61ft) would be placed to the north, east, and west of the building and tower, and secured into the native rock using rock bolts.

All of the facilities would be flown in by helicopter and assembled within the requested right-of-way over a 2-4 week period. If necessary, the site can be accessed via the existing road which terminates at the base of the ridge on which the proposed facilities are located. Personnel can traverse up to the site by foot.

Installation of the facilities is expected to consist of the following major components:

- a. Stake perimeter of site and locate facilities.
- b. Site preparation using hand tools such as picks and shovels.
- c. Install rock bolts for tower and building.
- d. Install building plat form and tower base.
- e. Construct building from concrete block.
- f. Tower will be prefab in sections off-site and flown to site for installation.

Any equipment used on site would be portable and have to be brought in by helicopter or on foot. The types of equipment to be utilized on site include various hand tools (shovel, picks, and rakes), power saws (wood, metal, and masonry), drills, hammers, nail/riveting guns, surveyor equipment, and wheel barrows. Larger power equipment would include

portable drilling equipment, cement/motor mixer, generator(s) and portable welding equipment. Whenever possible the tower base or building platform areas will be utilized as locations for work/power equipment setup in order to minimize ground disturbance. Construction will occur as soon as possible, after issuance of the ROW grant.

## **2.2 NO ACTION ALTERNATIVE:**

For the purposes of NEPA analysis, the Council on Environmental Quality (CEQ) requires a no action alternative to analyze the comparative consequences associated with the proposed action and the alternatives. For this analysis, the no action alternative would result in the proposed communication tower not being approved and the public need for additional communication facilities would not be met.

## **2.3 OTHER REASONABLE ALTERNATIVES:**

The proposed location is the only site which will satisfy the public need for FM communication service in the area. This site is at sufficient elevation, is of sufficient distance to not interfere with other FCC approved communication facilities, and not located within a wilderness area or ACEC. The proposed facility has been designed to maximize its efficiency by utilizing solar energy and to have as small a project foot print as possible. Therefore, no other reasonable alternatives have been identified for the proposed project.

## **3.0 AFFECTED ENVIRONMENT**

This section addresses the existing conditions in the general project area, as well as, identifying issues for specific resources/concerns in proximity to the proposed project site.

The proposed project is located north of Glendale and west of Mesquite, Nevada, in the Mormon Mountain Range at an elevation of 4,300 feet. The proposed project area is located adjacent to areas with high topographic relief to the north and west.

According to the RMP:

“because of the typically dry atmosphere, bright sunny days and clear nights frequently occur. This in turn allows rapid heating of the ground surface during daylight hours and rapid cooling at night. The average range between the highest and the lowest daily temperatures is about 30 to 35 degrees Fahrenheit. Daily ranges are larger in summer than in winter. Since heated air rises and cooled air sinks, winds tend to blow upslope during the day and down slope at night. This upslope and down slope cycle generally occurs in all the geographical features, including mountain range slopes and river courses. The larger the horizontal extent of the feature, the greater the volume of air that moves in the cycle. Terrain diversity causes complex movements in the cyclic air patterns, with thin layers of moving air embedded within the larger scale motions. The low-level, thermally driven winds also are embedded within larger scale upper wind systems (synoptic winds). Synoptic winds in the region are predominantly west

to east, characterized by daily weather variations that enhance or diminish the boundary layer winds, and substantially channeled by regional and local topography.

In Ely and Caliente, the average annual precipitation is just under 10 inches during the period of record (1971-2000). Variations in precipitation are due mainly to differences in elevation and exposure to precipitation-bearing storms. The average annual number of days with precipitation of 0.01 inch or more varies considerably; Las Vegas averages 23, Reno 49, Winnemucca 67, Caliente 46, Ely 72, and Elko 78. Higher elevations in the planning area would have more frequent precipitation events and would receive more annual rainfall than either Ely or Caliente” (BLM FEIS 2007).

Resource/Concern	Issue(s) Analyzed? (Y/N)	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	No	No long term impacts.
Cultural Resources	Yes	Project has received cultural inventory. No cultural resources were present.
Forest and Rangeland Health	No	Does not affect.
Migratory Birds	Yes	Migratory Birds are present within the area.
Native American Religious Concerns	No	None present.
FWS Listed or proposed for listing Threatened or Endangered Species or critical habitat.	No	The entire proposed project site is outside tortoise habitat.
Wastes, Hazardous or Solid	No	No wastes are anticipated.
Water Quality, Drinking/Ground	No	There are no known water resources within or in close proximity to the surface of the proposed project site.
Wilderness	No	Does not impact wilderness.
Environmental Justice	No	Not affected.
Floodplains	No	Does not change any watershed properties.
Wetlands/Riparian Zones	No	Does not affect.
Invasive Non-native Species	Yes	Potential for the spread of weeds.
Special Status Animal Species, other than those listed or proposed by the FWS as Threatened or Endangered	Yes	Several species may or have the potential to be impacted by the proposed project.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or Endangered	No	None present.
Wild Horses	No	Does not affect.
Fish and Wildlife	Yes	Potential impacts to wildlife species other than fish.
Vegetation/Soils/Watershed	Yes	Yucca and cacti are present within the project site.

Special Designations other than Designated Wilderness	No	None present.
VRM	Yes	Proposed project must meet class II VRM objectives.
Grazing Uses	No	Does not affect.
Land Uses	No	Proposed site is adjacent to an existing communication site.
Recreation Uses	No	Does not affect.
Paleontological Resources	No	Does not affect.
Water Resources (Water Rights)	No	Does not affect.
Mineral Resources	No	Does not affect.
Vegetative Resources (Forest or Seed Products)	No	Does not affect.

### 3.1 ISSUES:

Cultural Resources, Migratory Birds, Invasive Non-Native Species, Wildlife, Vegetation, Visual, and Land Use.

#### 3.1.1 Cultural Resources:

Cultural resources include, but are not limited to, objects, sites, structures/features, buildings, and districts, at least 50 years or older, which are of importance to a culture or community for scientific, traditional, religious, or other reason. Under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, federal agencies must assess and consider the potential effect(s) of undertakings involving federal funds and/or public lands. Additionally, Section 106 of the NHPA requires federal agencies to provide the Advisory Council on Historic Preservation an opportunity to comment on the undertaking prior to the issuance of any federal authorization.

#### 3.1.2 Migratory Birds:

Under the Migratory Bird Treaty Act of 1918 and subsequent amendments (16 U.S.C. 703-711), it is unlawful to take, kill, or possess migratory birds. Executive Order 13186 issued January 11, 2001 further defines the responsibilities of Federal Agencies to protect migratory birds; a list of those protected birds can be found in 50 C.F.R. 10.13.

The following data reflect survey blocks and/or incidental sightings of bird species from the Atlas of the Breeding Birds of Nevada (Floyd et al. 2007). This data represent birds that were confirmed, or are probably/possibly breeding within the block surveyed. This data is not comprehensive, and additional species not listed here may be present within the proposed project area: Swainson's Hawk (*Buteo swainsoni*), Red-tailed Hawk (*Buteo jamaicensis*), Gambel's Quail (*Callipepla gambelii*), Costa's Hummingbird (*Calypte costae*), Ladder-backed Woodpecker (*Picoides scalaris*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Western Kingbird (*Tyrannus verticalis*), Horned Lark (*Eremophila alpestris*), Verdin (*Auriparus flaviceps*), Cactus Wren (*Campylorhynchus brunneicapillus*), Northern Mockingbird (*Mimus polyglottos*), Loggerhead Shrike (*Lanius ludovicianus*), Black-throated Sparrow (*Amphispiza bilineata*), Western Meadowlark (*Sturnella neglecta*), Scott's Oriole (*Icterus parisorum*).

### **3.1.3 Invasive Non-Native Species:**

The BLM defines a weed as a non native plant that disrupts or has the potential to disrupt or alter the natural ecosystem function, composition and diversity of the site it occupies. A weeds presence deteriorates the health of the site, it makes efficient use of natural resources difficult, and it may interfere with management objectives for that site. It is an invasive species that requires a concerted effort (manpower and resources) to remove from its current location, if it can be removed at all. "Noxious" weeds refer to those plant species which have been legally designated as unwanted or undesirable. This includes national, state and county or local designations.

A Noxious Weed Risk Assessment was completed and no noxious or invasive weeds were identified within the proposed project foot print. Currently, there are no noxious weeds within or immediately adjacent to the proposed ROW. The closest dirt road/trail is approximately 0.5 mile to the north and is approximately 600 feet lower in elevation. However, there is at least one noxious weed species, Tamarisk (*Tamarix* spp.) observed which was approximately 5 miles to the west in the Meadow Valley Wash. Other noxious/invasive species may be present within the Meadow Valley Wash area on either private or public lands, but none were observed.

### **3.1.4 Special Status Animal Species:**

The BLM shall ensure that actions authorized, funded, or carried out by the BLM do not contribute to the need for a species to become listed. Any sensitive wildlife species and their habitat must be managed for protection. Sensitive wildlife include species which are candidates for or are proposed for listing, under the Endangered Species Act (ESA) or species which have been designated by the BLM or state as in need of special management.

There are several species of wildlife which are designated by the BLM or State of Nevada as sensitive. These species either occur, or have the potential to occur, within the project area.

BLM sensitive species include: Allen's lappet-browed (*Idionycteris phyllotis*), big free-tailed bat (*Nyctinomops macrotis*), California myotis (*Macrotus californicus*), chuckwalla (*Sauromalus obesus*), fringed myotis (*Myotis thysanodes*), greater western mastiff bat (*Umops perotis californicus*), long-eared myotis (*Myotis evotis*), long-legged myotis (*Myotis volans*), pallid bat (*Antrozus pallidus*), spotted bat (*Euderma maculatum*), Townsend's western big-eared bat (*Corynorhinus townsendii*), and the Western small-footed myotis (*Myotis ciliolabrum*).

The State of Nevada sensitive species is the Desert bighorn sheep (*Ovis canadensis nelsoni*).

### **3.1.5 Fish and Wildlife:**

Wildlife species in the project area are those that have adapted to habitats with little cover and dry conditions. Since surface water is rare and transitory, no fish or amphibian species occur in the project area. A limited number of reptile, bird, and mammal species

are likely to occur in the project area. These include but are not limited to common species such as: side-blotched lizard (*Uta stansburiana*), Great Basin collard lizard (*Crotaphytus bicinctores*) coachwhip (*Masticophis flagellum*), Great Basin gopher snake (*Pituophis catenifer deserticola*), Gambel's Quail (*Callipepla gamebelii*), Black-throated sparrow (*Amphispiza bilineata*), desert woodrat (*Neotoma lepida*), and white-tailed antelope squirrel (*Ammospermophilus leucurus*).

### **3.1.6 Vegetation:**

According to the RMP, the proposed project area is generally characterized shrub land in the Sonora Basin and Range, Major Land Resource Area (MLRA).

Within the proposed project area the perennial vegetation is dominated by blackbrush (*Coleogyne ramosissima*), with scattered individuals of creosote bush (*Larrea tridentata*), brittlebush (*Encelia farinosa*), Nevada tea (*Ephedra* ssp.), Mojave yucca (*Y.schidigera*), and beavertail cactus (*Opuntia basilaris*).

### **3.1.7 Visual Resource Management:**

Visual resources consist of the natural and man-made features that give a particular environment its aesthetic qualities. These features may be natural appearing or modified by human activities. Together they form the overall impression of an area, referred to as its visual character. Landforms, water sources, vegetation and man-made features are treated as characteristic of an area if they are inherent to the formation, structure and function of the landscape. Visual character is evaluated to assess whether a proposed project would appear compatible with the existing setting or would contrast noticeably with the setting and appear out of place.

In order to identify and protect the visual resources on public lands, the BLM has created four Visual Resource Management (VRM) classes to provide a set of standards for the design and development of future projects and for rehabilitation of existing projects. The proposed project is in the VRM Class II. In a Class II VRM the objective is to retain the existing character of the landscape. The level of change to the landscape should be low. Management activities may be seen, but not attract the attention of the casual viewer.

### **3.1.8 Land Use:**

The proposed project ROW location is adjacent to a previously authorized (N-43405) and existing site for Nellis Air Force Base (Nellis) facilities. The site consists of a small helicopter pad (100 ft. diameter) and small solar communication facilities (10 ft. x 15 ft.).

## **4.0 ENVIRONMENTAL CONSEQUENCES**

This section identifies those probable consequences that the proposed action may have on the resources which were previously identified for analysis.



## **4.1 DIRECT AND INDIRECT EFFECTS**

### **4.1.1 Cultural Resources:**

A literature search was conducted, during which it was identified that no previous cultural inventory had been conducted in the proposed project's location. As a result of the literature search, the BLM completed a Class III inventory on November 21, 2008, within the Area of Potential Effect (APE) for the proposed ROW. No cultural resources were identified. Accordingly, based on the literature search and Class III inventory, the proposed undertaking will have "no effect" (36 CFR 800.4 (a)-(c)) on any listed or eligible historic or cultural resources.

### **4.1.2 Migratory Birds:**

Under the Migratory Bird Treaty Act of 1918 and subsequent amendments (16 U.S.C. 703-711), it is unlawful to take, kill, or possess migratory birds. A list of those protected birds can be found in 50 C.F.R. 10.13. The issuance of a ROW for this project requires the proponent to comply with the Migratory Bird Treaty Act and avoid potential impacts to those listed birds.

Depending on the time of year for construction, there is the potential to disturb nesting birds within or immediately adjacent to the proposed ROW. In order to ensure there is no impact on nesting migratory birds, surveys for nests shall be completed prior to any activities if construction occurs from March 1 through August 31, and any nests will be avoided.

The proposed project would also result in the permanent loss of approximately 600 ft<sup>2</sup> nesting and/or foraging habitat at the rock bolt anchor locations for the tower legs, solar panel arrays, and/or building platform. However, the loss of this small amount of habitat in close proximity to similar undisturbed similar habitat on adjacent areas is expected to have a minimal impact.

Additionally, a minimal impact associated with collisions between birds and the tower may be realized. The proposed tower height, location on a ridge top, and FAA requirements for lighting may contribute to bird strikes. However, the open lattice structure of the tower and lack of guide wires should serve to reduce collision frequencies.

With the application of these mitigation measures identified in Section 4.3, (7, 8, 20, & 27), only a small impact to migratory birds is expected.

### **4.1.3 Invasive Non-Native Species:**

Southern Nevada rangelands are being impacted by the presence of invasive, non-native vegetation (weeds).

A Noxious & Invasive Weed Risk Assessment (Appendix B) was completed and no noxious or non native invasive weeds were identified within or immediately adjacent to the proposed ROW. The closest dirt road/trail is approximately 0.5 mile to the north and

is approximately 600 feet lower in elevation. However, there was at least one noxious weed species observed, salt cedar (*Tamarix spp.*), which was approximately 5 miles to the west in the Meadow Valley Wash. Other noxious/invasive species may be present within the Meadow Valley Wash area on either private or public lands, but none were observed.

Wherever possible vegetation would be crushed and not removed in order to reduce potential areas for noxious weed germination. Therefore, disturbed areas which may serve as potential germination sites would be kept to a minimum. Additionally, the western exposure, moderate slope, rocky terrain, and shallow soils would serve to preclude the successful germination of many noxious weed species. The proposed site's isolation from other current and proposed activities greatly reduces the chances of weedy species spread into the area. However, during construction, the transporting of the facilities and equipment could facilitate the introduction of noxious weeds and disturbed areas may provide areas for germination. Additionally, the use of a helicopter to access the ROW (pre and post construction) could facilitate the transportation of seeds to and from the project area.

Depending on the noxious or invasive weed species, infestations could spread and not be simply confined to areas of disturbance on site. Impacts to the native vegetation, associated with increased competition and/or the potential for increased fire frequency could occur. The degree of these potential impacts may be increased due to the remote nature of the site, and the fact that any infestations could go unnoticed for some period of time.

With the application of the mitigation measures identified in Section 4.3, (9 thru 24), only a minimal impact is expected.

#### **4.1.4 Special Status Wildlife:**

The special status species in the general area include the Desert bighorn sheep, mule deer, chuckwalla, and several species of bats. The entire proposed ROW is potential foraging habitat for Desert bighorn sheep as it lacks the cover and inaccessibility associated with lambing sites. The entire proposed ROW is also chuckwalla habitat, although no individuals or sign have been observed. In general one or more of the bat species may utilize the proposed ROW for foraging and/or temporary shelter within the rock crevasses. The lack of mining shafts, caves, large crevasses, and cliffs within the proposed ROW serve to provide minimal protection from predators. Therefore it is unlikely that bat colonies or individuals utilize the proposed ROW for permanent roosting or maternity sites.

Initial impacts to these species are expected to be associated with displacement from and/or avoidance of the proposed ROW during the 2-4 week construction period. These species would at least be displaced during construction and/or the associated land disturbance activities at the rock bolt anchor locations for the tower legs, solar panel arrays, and building platform. Subsequent potential impacts would likely be associated with loss of approximately 600 ft<sup>2</sup> of forage and temporary shelter habitat for Desert

bighorn sheep, and the bat species, as well as, approximately 600 ft<sup>2</sup> of chuckwalla habitat. In order to reduce any potential impacts, disturbance within the proposed ROW is designed for minimal permanent disturbance. During construction activities vegetation will be crushed instead of being removed whenever possible. Due to the small size of the proposed ROW and proximity to similar undisturbed similar habitat on adjacent areas, any potential impacts are expected to be minimal.

Depending on the time year the construction activities take place and/or subsequent maintenance visits are made, there may be some minimal impact to Desert bighorn sheep lambing sites within one to two miles of the proposed ROW.

There may be a minimal impact to bat species as a result of colliding with the tower once it is complete. However, the open lattice structure of the tower and lack of guide wires should serve to reduce collision frequencies.

With the application of the mitigation measures identified in Section 4.3, (7, 8, & 20), only a small impact to special status species is expected.

#### **4.1.5 Wildlife:**

Wildlife species in the general area include various species of common small mammals, birds and reptiles. These species would at least be initially displaced during construction and associated land disturbance activities. Long term land disturbance associated with the rock bolt anchor locations for the tower legs, solar panel arrays, and building platform would result in a loss of approximately 600 ft<sup>2</sup> of habitat within the proposed ROW. However, due to the small size of the expected disturbance and the proximity of the proposed ROW to similar undisturbed adjacent areas, any potential impacts are expected to be minimal.

With the application of the mitigation measures identified in Section 4.3, (7, 8, & 20), only a small impact to wildlife is expected.

#### **4.1.6 Vegetation:**

All cactus/yucca that might be impacted by this action must be salvaged and transplanted out of harms way but still within the granted ROW for the proposed project.

With the application of the mitigation measures identified in Section 4.3, (4, 6, & 20), only a small impact to wildlife is expected.

#### **4.1.7 Visual Resources:**

This site is located within VRM Management Class II. The objective of Class II is to retain the existing character of the landscape, the level of change to the landscape should be low and changes should repeat the basic elements found in the natural features of the landscape – form, line, color, & texture. Management activities may be seen but should not attract attention of the observer.

BLM completed a Visual Contrast Rating Forms for two different key observation points

(KOP), and determined that this activity is in conformance with VRM Class II objectives. With the application of the mitigation measures identified in Section 4.3, (25), no impact to visual resources is expected

#### **4.1.8 Land Use**

Due to the close proximity of the proposed ROW and the existing Nellis facilities there is the potential for one to interfere with the operation of the other. In a letter dated January 15, 2009, from Nellis, the following comments were identified.

1. The proposed tower has been closely scrutinized and found to be of minimal impact to current and planned operations. However, Nellis AFB is concerned with any development that interferes with our critical testing and training operations. The proposed 500 ft above ground level (AOL) tower is located beneath the Desert Military Operations Area (MOA) on the Nevada Test and Training Range (NTTR). The Desert MOA is special use airspace and begins at 100 ft AOL. The military conducts training at high speeds and at a wide range of altitudes within the Desert MOA and any intrusion into this airspace could adversely impact military training operations in the area. Therefore, we reserve the option to object to any additional towers, turbines, or other developments that may adversely impact our ability to safely and effectively carry out our critical mission on the NTTR.
2. Request the new equipment be located to not impact our ability to access the site to maintain/repair or change out our equipment. Request coordination of final construction plans that show location and height of equipment prior to construction commencing.
3. The licensee must be aware during certain range operations, government electronic activity (jamming) could interfere with that licensee's ability to communicate with this site.
4. The licensee's radio frequency transmission must not affect the government's ability to conduct electronic activity (jamming). The licensee will reduce power or cease operations as necessary to allow operations if interference is shown to be from their transmitter.

With the application of the mitigation measures identified in Section 4.3, (28, 29, & 30), only a minimal impact is expected.

#### **4.2 CUMULATIVE IMPACTS:**

In general, the potential cumulative impacts associated with the proposed action are addressed in the Ely RMP/EIS. Therefore, this document tiers to the analysis presented in the ELY RMP/EIS and supplements with locally specific analysis which is directly related to the proposed action. Unless noted below, the cumulative impact area includes all of the approximately 322,900 acres within the Meadow Valley South watershed (214B).

#### **4.2.1 Past, Present, and Reasonably Foreseeable Future Actions:**

Past actions in the proposed project area which overlap or are adjacent to the proposed project include the existing communication site to the north, the Desert Military Operations Area (above 100 ft from ground level), and activities associated with the current Mormon Mountain grazing allotment (#126). Both of these actions, the communication site, and the grazing allotment are currently active and are the only other uses within the proposed project area. Numerous other authorizations/uses such as ROW's for railroad, roadways, and utilities, as well as, the Breedlove (#23) and Mormon Peak (#126) grazing allotments are present within the cumulative impact area.

Potential future actions which would either overlap or be adjacent to the proposed project area would likely include either modifications to existing facilities/uses or other new communication facilities which would be compatible. Additionally, it is expected that a management plan for the Mormon Mountain Wilderness Area will be completed in the future which may identify additional management objectives within the proposed project area. Other future uses within the cumulative impacts area are expected to be from either the modification of existing uses or for new facilities with similar purposes.

#### **4.2.2 Potential Impacts:**

Potential cumulative impacts associated with the proposed action are expected to be mostly associated with current/future management concerns. The remote and isolated location of the proposed ROW has been minimally impacted by past actions (communication site and grazing). The other past authorizations/uses within the cumulative impact area are at lower elevations and the majority of them are least 5 miles away.

The following presents the potential cumulative impacts for those environmental issues identified in this document.

**4.2.2.1 Cultural Resources:** While there are no known cultural resources within the APE or historic properties that would be adversely affected by the proposed undertaking within a one mile radius, there is always the potential for their future discovery. Therefore potential cumulative impacts to cultural resources will be addressed through compliance with Section 106 of the NHPA, the Archeological Resource Protection Act of 1979, and the BLM/SHPO Protocol Agreement as amended. These laws and agreement provide for the protection, identification, recordation, and classification of cultural resources within the APE for any current or future proposed project. Therefore, no cumulative impacts to cultural resources are expected.

**4.2.2.2 Migratory Birds:** It is anticipated that the proposed project combined with the existing facilities will result in the long term loss of less than 1,000 ft<sup>2</sup> of potential feeding and/or nesting sites in the immediate area. These areas are either currently covered by a helicopter pad and small communication facilities or will be covered by the proposed, rock bolt anchor locations for the tower legs, solar panel arrays, and/or building platform. Within the cumulative impacts area, the majority of past and current authorizations/uses occur at lower elevations in different feeding/nesting habitat.

Therefore, the potential past and present cumulative impacts associated with the proposed action are expected to be minor. Any potential cumulative impacts associated with future actions will require further analysis and will have to comply with the Migratory Bird Treaty Act of 1918 and subsequent amendments (16 U.S.C. 703-711). Additionally, the majority of lands with similar elevation, topography, and habitat are excluded from other authorization/uses within the Mormon Mountain Wilderness area.

**4.2.2.3 Noxious Weeds:** Within the proposed ROW noxious or invasive weed species, infestations could spread and not be simply confined to areas of disturbance within the proposed ROW. Impacts to the native vegetation, associated with increased competition and/or the potential for increased fire frequency could occur. The degree of these potential impacts may be increased due to the remote nature of the site, and the fact that any infestations could go unnoticed for some period of time. Cumulative impacts associated with the proposed project are expected to be mitigated through current BLM management for those species identified on the Nevada state list of noxious weeds. Any future actions would have to comply with the Federal Noxious Weed Act, Public Law 93-629 (7 U.S.C. 2801 et seq.; 88 Stat. 2148), enacted January 3, 1975, Executive Order 13112 issued February 3, 1999, and Nevada Revised Statute Chapter 555.005. These documents define what species are considered noxious and invasive, as well as, mandate that appropriate actions are taken to reduce the potential for the introduction and/or spread of those species.

**4.2.2.4 Special Status Species Wildlife:** The proposed project combined with the existing facilities will result in the long term loss of less than 1,000 ft<sup>2</sup> of forage and temporary shelter habitat for Desert bighorn sheep and the bat species, and approximately 600 ft<sup>2</sup> of chuckwalla habitat within and adjacent to the proposed ROW. These areas are either currently covered by a helicopter pad and small communication facilities or will be covered by the proposed, rock bolt anchor locations for the tower legs, solar panel arrays, and/or building platform. Within the cumulative impacts area, the majority of past and current authorizations/uses occur at lower elevations in different habitat. Therefore, the potential past and present cumulative impacts associated with the proposed action are expected to be minor. Any potential cumulative impacts associated with future actions will require further analysis and will have to comply with applicable federal, state, and local regulations. Additionally, the majority of lands with similar elevation, topography, and habitat are excluded from other authorization/uses since they are within the Mormon Mountain Wilderness area.

**4.2.2.4 Wildlife:** Within and adjacent to the proposed ROW, a long term loss of less than 1,000 ft<sup>2</sup> of potential habitat for several common wildlife species is expected. These disturbed areas are either currently covered by a helicopter pad and small communication facilities or will be covered by the proposed, rock bolt anchor locations for the tower legs, solar panel arrays, and/or building platform. Within the cumulative impacts area, the majority of past and current authorizations/uses occur at lower elevations in different habitat. The majority of lands with similar elevation, topography, and habitat are excluded from other authorization/uses since they are within the Mormon Mountain Wilderness area. Therefore, the potential past and present cumulative impacts associated

with the proposed action are expected to be minor. Any potential cumulative impacts associated with future actions will require further analysis and will have to comply with applicable federal, state, and local regulations.

**4.2.2.5 Vegetation:** The proposed project combined with the existing facilities will result in the long term loss of less than 1,000 ft<sup>2</sup> of vegetation. These areas are either currently covered by a helicopter pad and small communication facilities or will be covered by the proposed, rock bolt anchor locations for the tower legs and solar panel arrays, as well as, the area under the building platform. Additionally, any cacti or yucca which may be impacted by the proposed project will be salvaged and transplanted within the proposed project site. Within the cumulative impacts area, the majority of past and current authorizations/uses occur at lower elevations with different vegetation. Therefore, the potential past and present cumulative impacts associated with the proposed action are expected to be minor. Any potential cumulative impacts associated with future actions will require further analysis and will have to comply with applicable federal, state, and local regulations. Additionally, the majority of lands with similar elevation, topography, and vegetation are excluded from other authorization/uses within the Mormon Mountain Wilderness area.

**4.2.2.6 Visual:** Due to the topography and remoteness of the in the area, the closest points for most viewers to observe the proposed ROW are approximately 16-18 miles to the south and southwest along State Route 168 and I-15. Therefore, the cumulative impacts area for visual recourses is defined as being those lands which are located outside the Mormon Mountain Wilderness area and are either contiguous with the proposed ROW to the north or west or are located farther to the south. The potential cumulative impacts are expected to be associated with the proposed action and any future actions which may be authorized. The current facilities are much smaller and do not to contribute additional visual impacts and the proposed facilities comply with VRM Class II requirements. Therefore, any potential impacts would be associated with future actions and would have to comply with the VRM Class II requirements.

**4.2.2.7 Land Use:** The current communication facilities and the Desert Military Operations Area, both utilized by Nellis are the only other land use activities within or adjacent to the proposed ROW which may be affected. However, though continued coordination with Nellis, only a minimal cumulative impact associated with the facilities to be installed within the proposed ROW is expected. Cumulative impacts associated with future actions would require additional coordination with Nellis as well as conformance with any applicable federal, state, and local regulations.

The implementation of the proposed action is consistent with management direction identified in the Ely RMP and is expected to result in the permanent cumulative disturbance of less than 1,000 ft<sup>2</sup> of federal land. By complying with the RMP management directions and implementation of the mitigation measures presented in Section 4.3, only minor cumulative impacts are expected.

#### **4.3 DESCRIPTION OF MITIGATION MEASURES AND RESIDUAL IMPACTS:**

The following mitigation measures shall also be applied to the proposed action:

1. The proponent is responsible for clean-up and assumes liability for any and all releases of hazardous substances. Proponent will immediately notify the BLM Authorized Officer and the National Response Center at 775- 687-9485 or 888-331-6337 (NDEP) on all spills/releases in which the reportable quantity for the particular compound is exceeded - 40 CFR part 302.
2. Location sites shall be maintained in a sanitary condition at all times; litter shall be disposed of promptly at an authorized solid waste disposal site. Failure to remove litter may result in assessment of damages by the Authorized Officer, BLM. "Litter" means all discarded matter including but not limited to trash, garbage, refuse, ashes and equipment. Site must be maintained and left in a clean and safe condition.
3. The proponent is required to post warning signs around project area and will follow all traffic laws.
4. Staking, flagging materials, equipment, temporary facilities, litter and all other project related materials will be removed by the proponent within 15 working days following the project.
5. Mitigation efforts shall be taken to minimize impacts to vegetation during all phases of activities within the Plan of Operations area. All cacti and yucca plants that will be impacted by this project must be salvaged and will either be directly transplanted or stockpiled within the proposed project area. Topsoil will be stockpiled and utilized in post construction reclamation efforts.
6. The top 2-3 inches of soil in undisturbed areas shall be stockpiled on site for use in reclamation areas. This top soil layer contains native seeds which can serve as a natural "seed bank" for local plant species. When utilized during reclamation efforts the soil should be evenly distributed across the site at a 2-3 inch depth and left un-compacted.
7. Proponent shall construct, maintain, operate and/or modify structures and facilities as directed by the Authorized Officer to protect and minimize adverse effects upon raptors and other wildlife. This includes but is not limited to the use of the minimum intensity strobe lights permissible by the Federal Aviation Authority.
8. The project proponent shall survey for and document any wildlife fatalities, including raptors, bats, and migratory birds on or near project facilities. Surveys shall be completed at least twice a year or more during inspection/maintenance



- visits. Surveys shall include the facilities themselves, the ground underneath them as well as adjacent areas within the ROW. Once a year, or as determined by the authorized officer, a report compiling the surveys shall be submitted to the BLM.
9. The project proponent shall coordinate project activities with the BLM Weed Coordinator regarding any proposed herbicide treatment. If required the project proponent shall prepare, submit, obtain and maintain a pesticide use proposal (PUP) for the proposed action.
  10. The project proponent shall limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed. The project proponent will avoid creating soil conditions that promote weed germination and establishment.
  11. The project proponent shall begin project operations in weed free areas whenever feasible before operating in weed-infested areas.
  12. The project proponent shall locate equipment storage, machine, and vehicle parking or any other area needed for the temporary placement of people, machinery, and supplies in areas that are relatively weed-free. The project proponent shall avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seeds or plant parts are least likely.
  13. The project proponent shall determine equipment-cleaning sites (if equipment is infested with weed seeds, plant parts, or mud and dirt). Project related equipment and machinery (this especially includes the nooks and crannies of undercarriages) will be cleaned using compressed air or water to remove mud, dirt, and plant parts before moving into and from relatively weed-free areas. Seeds and plant parts will be collected, bagged, and deposited in dumpsters destined for local landfills, when practical.
  14. Monitoring will be conducted for a period no shorter than the life of the permit or until bond release and monitoring reports will be provided to the BLM. If the spread of noxious weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations. All weed control efforts on BLM-administered lands will be in compliance with BLM Handbook H-9011, H-9011-1 Chemical Pest Control, H-9014 Use of Biological Control Agents of Pests on Public Lands, and H-9015 Integrated Pest Management. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the Authorized Officer 60 days prior to the planned application date. A pesticide Application Report must be submitted to the Authorized Officer by the end of the fiscal year follow chemical application.

15. Prior to the entry of vehicles and equipment to a project area, areas of concern will be identified and flagged in the field by a weed scientist or qualified biologist. The flagging will alert personnel or participants to avoid areas of concern. These sites will be recorded using global positioning systems or other Ely District approved equipment and provided to the District Weed Coordinator or designated contact person.
16. Prior to entering public lands, the contractor, operator, or permit holder will provide information and training regarding noxious weed management and identification to all personnel who will be affiliated with the implementation and maintenance phases of the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
17. To eliminate the transport of vehicle-borne weed seeds, roots, or rhizomes all vehicles and heavy equipment used for the completion, maintenance, inspection, or monitoring of ground disturbing activities; or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. All such vehicles and equipment will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the District Weed Coordinator or designated contact person.
18. To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for reclamation or stabilization activities, feed, bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District. A copy of the seed test results should be sent to the District Weed Coordinator or BLM Authorized Officer.
19. To eliminate the introduction of noxious weed seeds, roots, or rhizomes all source sites such as borrow pits, fill sources, or gravel pits used to supply inorganic materials used for construction, maintenance, or reclamation will be inspected and found to be free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District. Inspections will be conducted by a weed scientist or qualified biologist.
20. Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.).

21. Reclamation would normally be accomplished with native seeds only. These would be representative of the indigenous species present in the adjacent habitat. Rationale for potential seeding with selected nonnative species would be documented. Possible exceptions would include use of non-native species for a temporary cover crop to out-compete weeds. Where large acreages are burned by fires and seeding is required for erosion control, all native species could be cost prohibitive and/or unavailable. In all cases, seed mixes would be approved by the BLM Authorized Officer prior to planting.
22. Mixing of herbicides and rinsing of herbicide containers and spray equipment would be conducted only in areas that are safe distance from environmentally sensitive areas and points of entry to bodies of water (storm drains, irrigation ditches, streams, lakes, or wells).
23. Methods used to accomplish weed control objectives would consider seasonal distribution of large wildlife species.
24. No noxious weeds will be allowed on the site at the time of reclamation release. Any noxious weeds that become established will be controlled.
25. The tower and all structures associated with this project are colored Shadow Grey. This color is one of the BLM's standard environmental colors, and a copy of the color cart can be provided to the proponent for color matching.
26. Any cultural resources discovered by the Holder, or any person working on his behalf shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the BLM Authorized Officer.
27. The project proponent agrees to survey for nests of migratory birds between the periods of **March 1 and August 31**. A qualified biologist must survey the area for nests prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found, an appropriately-sized buffer area must be avoided until the young birds fledge.
28. Any new equipment, be located so as not impact the ability to access the existing communication facilities site (N- N-43405) for maintenance/repair or change out of equipment. Nellis shall be sent the final construction plans that show location and height of the equipment prior to construction commencing.
29. The proponent (licensee) must be aware during certain range operations, government electronic activity (jamming) could interfere with the proponents (licensee's) ability to communicate with this site.

30. The proponents (licensee's) radio frequency transmission must not affect the government's ability to conduct electronic activity (jamming). The proponent (licensee) will reduce power or cease operations as necessary to allow operations if interference is shown to be from their transmitter.

## **5.0 PERSONS/AGENCIES CONSULTED:**

### Bureau of Land Management

Victoria Barr	Supervisory Resource Management Specialist
Joseph David	Environmental Coordinator
Gordon Graves	Realty Technician
Dave Jacobson	Wilderness
Alan Kunze	Geologist
Chris Linehan	Visual Resources
Bonnie M. Million	Noxious & Invasive Weeds
Benjamin Noyes	Wild Horse & Burro
Melanie Peterson	Environmental Protection Specialist
Alicia Styles	Wildlife
Elvis Wall	Native American Coordinator
Lynn Wulf	Archaeologist

### Nevada Division of Wildlife

D. Bradford Hardenbrook

### Nellis Air Force Base

Colonel Howard D. Belote

### Kemp Communications

Will Kemp

### Breslin Builders

Al Banks

Kevin Owens

### Ventajas LLC

William Garrett

## **6.0 REFERENCES:**

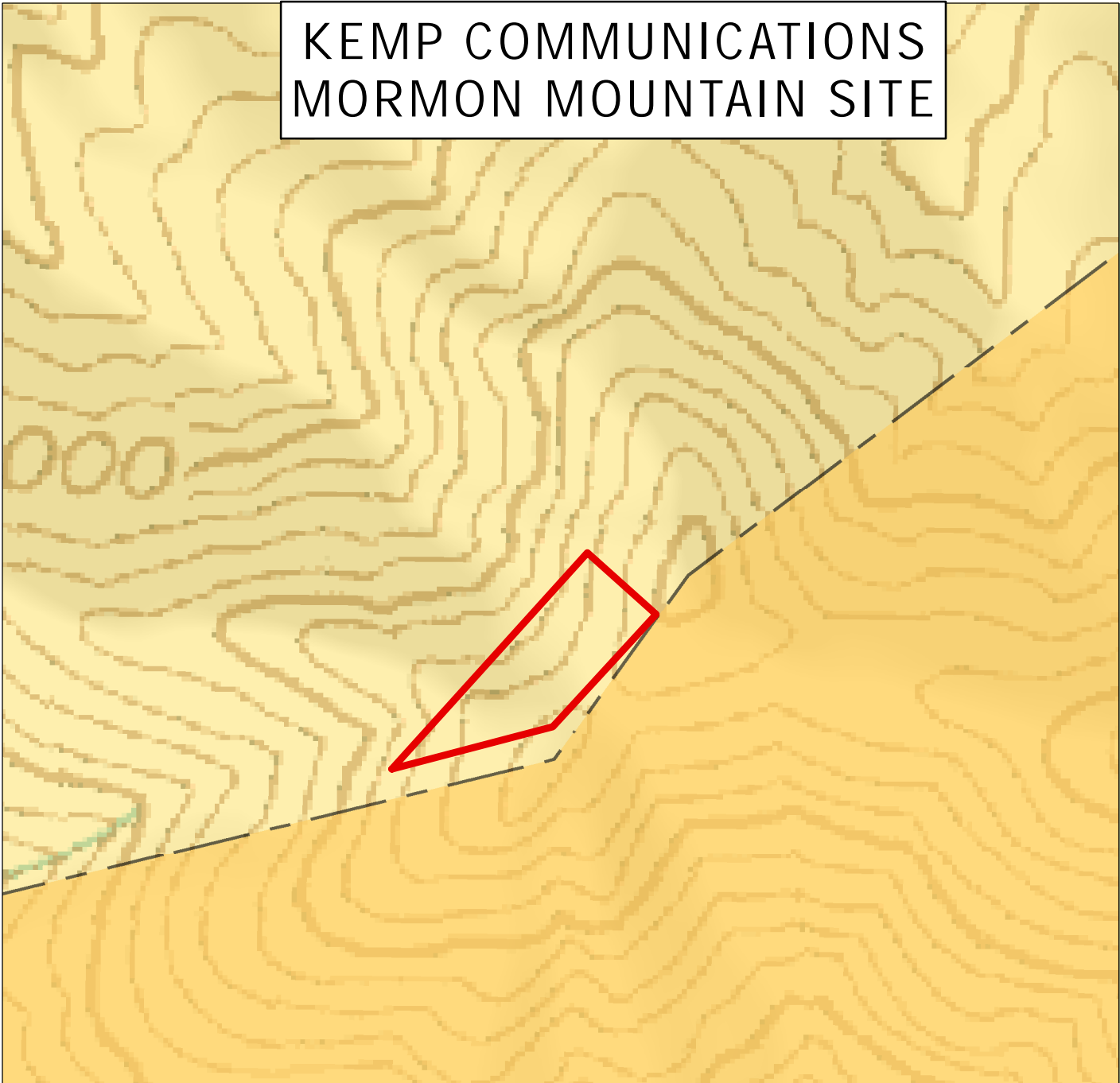
1. Floyd T, Elphick CS, Chisholm G, Mack K, Elston RG, Ammon EM, and Boone JD. 2007. Atlas of the Breeding Birds of Nevada. Reno: University of Nevada Press.

# **APPENDIX A**

## **Map**

# KEMP COMMUNICATIONS MORMON MOUNTAIN SITE

BLM

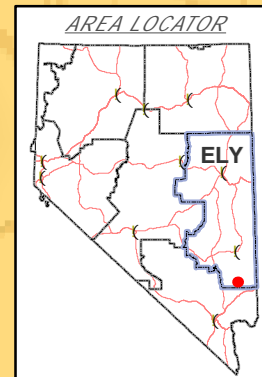
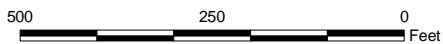


## Legend

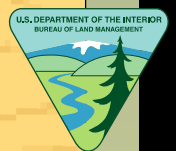
- |                 |                   |      |
|-----------------|-------------------|------|
| Kemp Comm Site  | <b>Landstatus</b> | FWS  |
| US Highways     | BLM               | DOD  |
| State Highways  | USFS              | PK   |
| Unpaved Roads   | NPS               | NVST |
| BLM Wilderness  | BIA               | PVT  |
| USFS Wilderness |                   |      |

*No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.*

Map Produced by: EYDO Realty Staff  
01/09/2009



Ely District Office



## **APPENDIX B**

### **Noxious & Invasive Weed Risk Assessment**

# **RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS**

## **Kemp Communications Mormon Mountain Comm. Site**

**N-85033**

**Location:** The proposed facilities are located on Federal lands generally located south and West of Mormon Mountain in Lincoln County, Nevada. The proposed facilities are located on a north westerly facing slope with moderate incline near the apex of the hill side (see attached map). The site has numerous rock outcroppings with the underlying bedrock either protruding thru the surface or covered by a thin layer of rocky soil.

Legal Description:

Mount Diablo, Meridian, Nevada

Township 11 South, Range 66 East

Section 24: SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>

**Project:** On October 10, 2008, a site visit was made to conduct an inventory of noxious & invasive weeds on and adjacent to the proposed site. The proposed project consists of a permanent lease site for installing a communication tower, building, and solar panel arrays on an irregular shaped parcel that is approximately 278 - 474 feet long and 168 - 265 feet wide (1.15 acres).

The free standing, three sided tower will be approximately 500 ft tall and made of triangular steel lattice. The base of the tower will be approximately 30 feet on each side with each of the three legs secured by drilled in rock bolts. The steel lattice design and rock bolt anchors are designed to with stand the expected wind loading.

The building will be approximately 26' x 26' and will be used to house operational equipment and batteries with solar panels placed on the roof. The uneven terrain, lack of soil, and difficult access make it impractical to site the building on concrete slabs. Therefore the building will be placed on a raised steel platform which will be anchored into the rock.

Free standing solar power arrays (approx. 42ft x 61ft) will be placed to the north, east, and west of the building and tower and secured into the native rock using rock bolts.

All of the facilities will be flown in by helicopter and assembled within the requested right-of-way. If necessary, the site can be accessed via the existing road which terminates at the base of the ridge the proposed facilities are located on. Personnel can traverse up to the site by foot.

Installation of the facilities is expected to consist of the following major components:

- a. Stake perimeter of site and locate facilities.
- b. Site preparation using hand tools.



- c. Install rock bolts for tower and building.
- d. Install building plat form and tower base.
- e. Construct building from concrete block.
- f. Tower will be prefab in sections and flown to site for installation.

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

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

**The factor rating for the proposed project rates as low, #2.** Currently there are no noxious weeds within or immediately adjacent to the proposed ROW. The closest dirt road/trail is approximately 0.5 mile to the north and is approximately 600 feet lower in elevation. However, there is at least one noxious weed species Tamarisk (*Tamarix spp.*) observed, which was approximately 5 miles to the west in the Meadow Valley Wash. Other noxious/invasive species may be present within the Meadow Valley Wash area on either private or public lands, but none were observed.

Where ever possible vegetation will be crushed and not removed in order to reduce potential areas for noxious weed germination. Therefore, disturbed areas which may serve as potential germination sites would be kept to a minimum. Additionally, the western exposure, moderate slope, rocky terrain, and shallow soils would serve to preclude the successful germination of many noxious weed species. The proposed site’s isolation from other current and proposed activities greatly reduces the chances of weedy species spread into the area. However, during construction, the transporting of the facilities and equipment could facilitate the introduction of noxious weeds and disturbed areas may provide areas for germination. Additionally, the use of a helicopter to access the ROW (pre and post construction) could facilitate the transportation of seeds to and from the project area.

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

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

**The factor rating for the proposed project rates as High, #9.**

Should any noxious weed species be established they would likely be confined to existing or new areas of disturbance. Therefore, direct impacts to native vegetation within proximity to the proposed project as a result of potential noxious weed introduction could occur but would likely be limited in nature. Depending on the noxious or invasive weed species, infestations could spread and not be simply confined to areas of disturbance on site. Impacts to the native vegetation, associated with increased competition and/or the potential for increased fire frequency could occur. The degree of these potential impacts may be increased due to the remote nature of the site, and the fact that any infestations could go unnoticed for some period of time. Cumulative impacts associated with the proposed project are expected to be mitigated through current BLM management for those species identified on the Nevada state list of noxious weeds.

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

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

**The factor rating for the proposed project rates as Moderate, #18.** Based on this risk rating, preventative management measures are needed for this project. Preventative management measures developed for this project are as follows:

- 1) The project proponent shall coordinate project activities with the BLM Weed Coordinator regarding any proposed herbicide treatment. If required the project proponent shall prepare, submit, obtain and maintain a pesticide use proposal (PUP) for the proposed action.
  
- 2) The project proponent shall limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed. The project proponent will avoid creating soil conditions that promote weed germination and establishment.
  
- 3) The project proponent shall begin project operations in weed free areas whenever feasible before operating in weed-infested areas.

4) The project proponent shall locate equipment storage, machine, and vehicle parking or any other area needed for the temporary placement of people, machinery, and supplies in areas that are relatively weed-free. The project proponent shall avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seeds or plant parts are least likely.

5) The project proponent shall determine equipment-cleaning sites (if equipment is infested with weed seeds, plant parts, or mud and dirt). Project related equipment and machinery (this especially includes the nooks and crannies of undercarriages) will be cleaned using compressed air or water to remove mud, dirt, and plant parts before moving into and from relatively weed-free areas. Seeds and plant parts will be collected, bagged, and deposited in dumpsters destined for local landfills, when practical.

- Monitoring will be conducted for a period no shorter than the life of the permit or until bond release and monitoring reports will be provided to the BLM. If the spread of noxious weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations. All weed control efforts on BLM-administered lands will be in compliance with BLM Handbook H-9011, H-9011-1 Chemical Pest Control, H-9014 Use of Biological Control Agents of Pests on Public Lands, and H-9015 Integrated Pest Management. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the Authorized Officer 60 days prior to the planned application date. A pesticide Application Report must be submitted to the Authorized Officer by the end of the fiscal year follow chemical application.
- Prior to the entry of vehicles and equipment to a project area, areas of concern will be identified and flagged in the field by a weed scientist or qualified biologist. The flagging will alert personnel or participants to avoid areas of concern. These sites will be recorded using global positioning systems or other Ely District approved equipment and provided to the District Weed Coordinator or designated contact person.
- Prior to entering public lands, the contractor, operator, or permit holder will provide information and training regarding noxious weed management and identification to all personnel who will be affiliated with the implementation and maintenance phases of the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
- To eliminate the transport of vehicle-borne weed seeds, roots, or rhizomes all vehicles and heavy equipment used for the completion, maintenance, inspection, or monitoring of ground disturbing activities; or for authorized off-road driving will be free of soil and debris capable of transporting weed propagules. All such vehicles and equipment will be cleaned with power or high pressure equipment prior to entering or leaving the work site or project area. Cleaning efforts will concentrate on tracks, feet and tires, and on the undercarriage. Special emphasis will be applied to axels, frames, cross members, motor mounts, on and underneath

steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out and refuse will be disposed of in waste receptacles. Cleaning sites will be recorded using global positioning systems or other mutually acceptable equipment and provided to the District Weed Coordinator or designated contact person.

- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for reclamation or stabilization activities, feed, bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District. A copy of the seed test results should be sent to the District Weed Coordinator or BLM Authorized Officer.
- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all source sites such as borrow pits, fill sources, or gravel pits used to supply inorganic materials used for construction, maintenance, or reclamation will be inspected and found to be free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District. Inspections will be conducted by a weed scientist or qualified biologist.
- Removal and disturbance of vegetation would be kept to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites, etc.)
- Reclamation would normally be accomplished with native seeds only. These would be representative of the indigenous species present in the adjacent habitat. Rationale for potential seeding with selected nonnative species would be documented. Possible exceptions would include use of non-native species for a temporary cover crop to out-compete weeds. Where large acreages are burned by fires and seeding is required for erosion control, all native species could be cost prohibitive and/or unavailable. In all cases, seed mixes would be approved by the BLM Authorized Officer prior to planting.
- Mixing of herbicides and rinsing of herbicide containers and spray equipment would be conducted only in areas that are safe distance from environmentally sensitive areas and points of entry to bodies of water (storm drains, irrigation ditches, streams, lakes, or wells).
- Methods used to accomplish weed control objectives would consider seasonal distribution of large wildlife species.
- No noxious weeds will be allowed on the site at the time of reclamation release. Any noxious weeds that become established will be controlled.

Reviewed by: \_\_\_\_\_

Bonnie M. Million  
Ely District Noxious & Invasive Weeds Coordinator

\_\_\_\_\_ Date