BLM

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

Preliminary Environmental Assessment

Black Rock Repeater

July 2012

PREPARING OFFICE

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Bureau of Land Management
Black Rock Field Office
5100 E. Winnemucca Blvd.
Winnemucca, NV 89445

Preliminary Environmental Assessment
Black Rock Repeater

DOI-BLM-NV-W030–2012–0013–EA

Prepared by
U.S. Department of the Interior
Bureau of Land Management
Winnemucca District Office
Black Rock Field Office
Winnemucca, NV

July 2012
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Chapter 1. Introduction

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1.1. Identifying Information:

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

Black Rock Repeater

DOI-BLM-NV-W030–2012–0013–EA

1.1.2. Location of Proposed Action:

T. 33 N., R. 24 E., sec. 5; T. 33.5 N., R. 24 E., sec.32

1.1.3. Name and Location of Preparing Office:

Lead Office - Black Rock Field Office (W030)

5100 E. Winnemucca Blvd.

Winnemucca, NV 89445

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

Subject Function Code: 43 CFR 2800

Case file number: N–91101

1.1.5. Applicant Name:

BLM

1.2. Introduction

The Bureau of Land Management (BLM), Black Rock Field Office, has submitted an application for a communication right-of-way in order to install a new radio repeater near the Black Rock Desert just west of Hwy 34, Figure 1.1 Vicinity MapFigure 1.1, “Vicinity Map” (p. 2). This communication site is needed in order to provide year round communication support for events on the Black Rock playa and to provide a more efficient avenue for communication for law enforcement activities and emergency services within this area.

The communication site would consist of a pre-fabricated 6’x8’x8’ shelter with attached monopole, 20’ unguyed tower and 4’ antenna. Maximum total height of the structure could reach 28’. The south side of the structure would contain two solar panels that would cover approximately the upper half of the face of the south side. The communication site would provide radio frequencies to the Black Rock Playa. This communication site is being proposed because current repeater facilities are insufficient to meet the need of law enforcement and emergency services personnel during large events. In years past, temporary repeaters have provided communication coverage for large recreation activities, such as Burning Man, on the playa; however, temporary

repeaters do not provide year round coverage. The new radio repeater facility would provide better and consistent coverage on the Black Rock playa and has the possibility of being connected, in the future, to the Central Nevada Interagency Dispatch Center if the need arises.

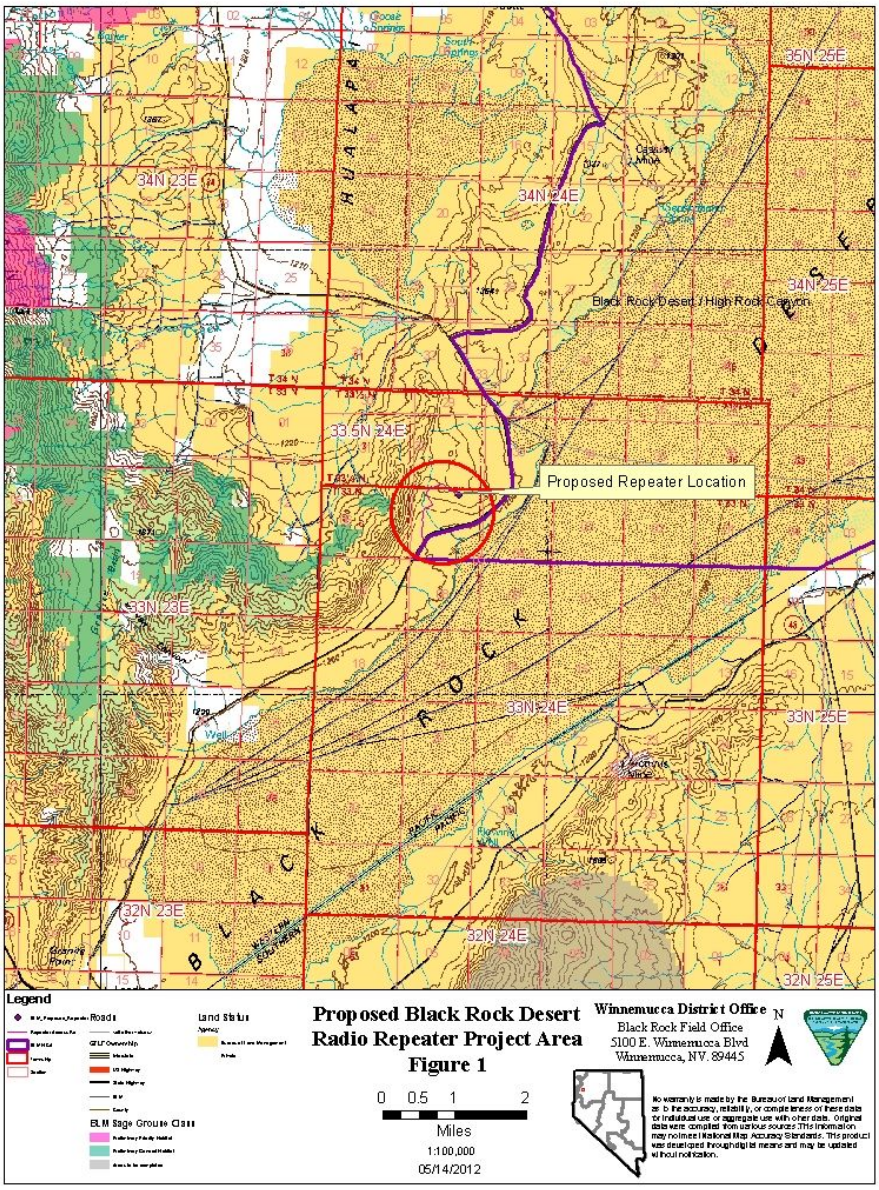

Figure 1.1. Vicinity Map

1.3. Purpose and Need for Action:

Purpose

The purpose of this Federal action is to allow Bureau of Land Management access to install a radio repeater communication site in order to improve the communication network within the Winnemucca District.

Need

The need for action is established by BLM's responsibility under the Federal Land Policy and Management Act of 1976 (FLPMA) (Section 501), and BLM regulations at 43 Code of Federal (CFR) 2800, to process ROW applications. FLPMA Section 507 allows rights-of-way to be provided to any department or agency of the United States.

1.4. Scoping, Public Involvement and Issues:

During an internal interdisciplinary meeting held June 12, 2012, issues identified were:

1. How would areas visible from the historic trails be impacted?
2. How would areas visible from the National Conservation Area be impacted?
3. How would wildlife, particularly migratory birds, be impacted?

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Chapter 2. Proposed Action and Alternatives

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2.1. Description of the Proposed Action:

2.1.1. Proposed Action

Under the Proposed Action the BLM would issue a right-of-way for the radio repeater for a period of twenty years. Coverage modeling [1] determined that the location shown on Figure 1 provides the best radio frequency coverage across the Black Rock playa and to the BLMs Black Rock Station. The proposed location would not need site preparations, such as clearing, leveling or excavating, for the shelter facility.

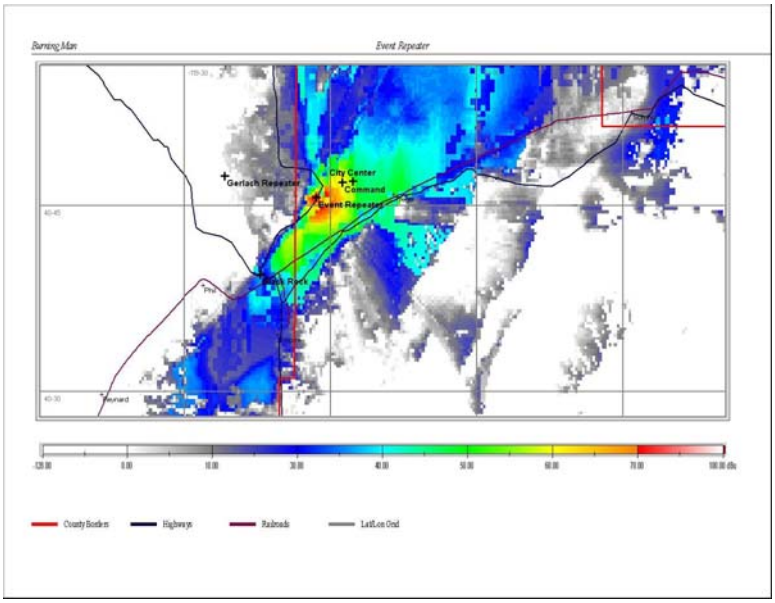

Figure 2.1. Project Area Propagation Study

The communications site would consist of installing a new pre-fabricated 6'x8'x8' shelter by trailering the shelter to the location using a four-wheeled drive pick-up truck towing a trailer. Estimated time of installation would be August 2012. The shelter would be lowered in place, and leveled using the 4' self-leveling legs and bolted into place. The self-leveling legs would be bolted to 2' x 3' concrete blocks that would be transported with the shelter. "Basket" features would also be attached to the legs and rocks from the area would be placed in the "baskets" to assist with securing the shelter in that location. Construction areas specific for the 20' tower and solar panels would not be necessary, these features would be attached to the shelter. The 20' tower is an unguyed monopole design and comes attached to the shelter. Once the shelter is placed at the site, the solar panels would be attached to the shelter and the monopole extended. A temporary work area would not be necessary. There is an existing access road to the proposed site location off of Highway 34 terminating at the radio repeater shelter. The access road would be used for initial installment, maintenance and removal. Upgrades to the road are not proposed. Tower lighting is not proposed since the proposed tower height is well below the 200' Federal Aviation Administration (FAA) requirement.

[1]Coverage modeling using propagation studies was conducted by the BLM. Propagation studies are a projection of radio frequency coverage based on topographic influences

2.1.2. Location and Access

The communication site would be located on BLM managed public lands at Mount Diablo Base and Meridian, Township 33 North, Range 24 East, section 5, NW¼ of the NE¼, with a short section of the access road extending into Township 33½ North. Range 24 East, section 32, Pershing County, Nevada, Figure 2.1, Project Area MapFigure 2.2, "Project Area Map" (p. 9).

Access to the communication site would occur by traveling north on State Highway 34, approximately 6½ miles outside of Gerlach, Nevada, then turning off the main highway onto an approximately 8'-10' unimproved two-track road that leads to the Project Area. No new roads would be constructed and minimal maintenance may occur during the life of the ROW if the travel surface is damaged by erosion. Any maintenance would occur within the existing footprint of the road.

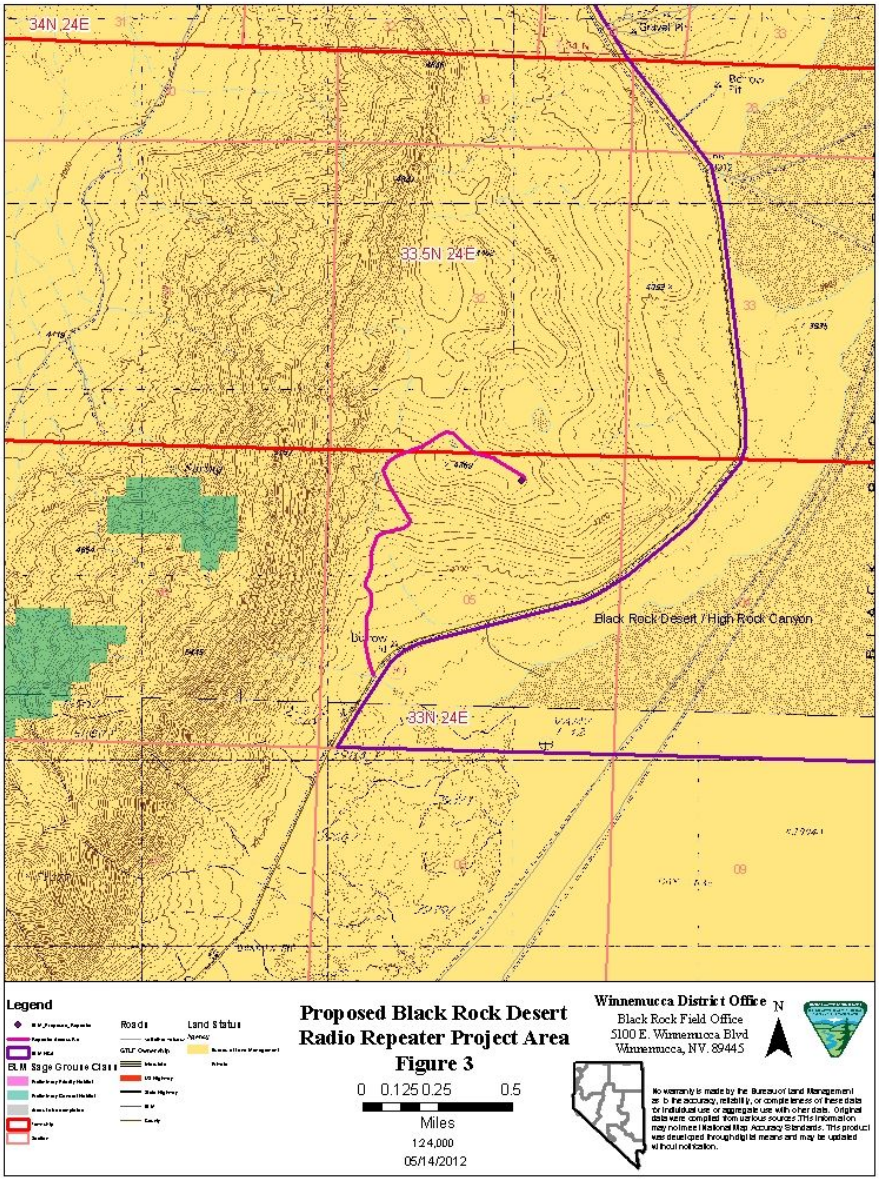

Figure of Project Area

Figure 2.2. Project Area Map

2.1.3. Environmental Protection Measures

Wildlife

General Comment

Travel and facility placement would be restricted to established roads and previously cleared areas thus preventing disturbance to bird nests and prevent or limit disturbance of other wildlife (rodents and herpetofauna in particular).

Migratory Birds

The building could provide perching and nesting sites for birds. In compliance with the Migratory Treaty Act, any nesting attempts will not be impeded nor any nests destroyed during March 1 through August 31 or while the nest is still active.

The proposed installation dates of the repeater facility would be during the migratory bird nesting season (March 1-August 31). Although surface disturbance would be minimal, a pre-construction migratory bird nest survey would be required to avoid potential destruction of active bird nests. This survey would be conducted no more than 10 days prior to and no less than 3 days prior to proposed disturbance activities. Nests are considered active if they contain eggs or young or if evidence of reproductive behavior (i.e. mated pairs, courtship displays, territorial defense, carrying nesting materials, transporting food, etc.) is observed (MBTA 1918). If active nests are located, a protective buffer, (the size of which would be depend upon the habitat requirement of the species, but no less than 260 feet) would be delineated and the entire buffer area avoided to prevent destruction or disturbance to the nest or reproductive behaviors until the nests are no longer active. The start and end dates of the seasonal restriction may be based upon site-specific information such as elevation and weather patterns which affect breeding chronology.

Raptors

Raptor nest surveys would be conducted by a BLM wildlife biologist no more than 10 days and not less than three days prior to any proposed disturbance. The survey area would encompass a .5 mile radius surrounding the proposed repeater location. If present, active raptor nests would be avoided following temporal and spatial restrictions and recommendations specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (2002).

Bighorn Sheep

The proposed installation would be near (approximately .3 miles) year-round bighorn sheep habitat (NDOW). Bighorn lambing season is May 1 through June 30. Routine maintenance activities would be limited during the months of July 1 to April 30 to avoid bighorn disturbance. If bighorns are within sight of the repeater or the road leading to it during the lambing season, maintenance activities would be delayed until the sheep are no longer present.

Noxious weeds, Invasive and Nonnative Species

Invasive, nonnative, and noxious weeds would be controlled through implementation of the following BMPs: Washing vehicles prior to entering the project area; and avoiding areas of known invasive, nonnative, and noxious weeds during periods when the weeds could be spread by vehicles. Vehicles would be washed at the nearest available location to the proposed Project Area. Water could be available at the BLM Black Rock Station.

Visual Resources

The radio repeater shelter would be placed back from the edge of the hill and painted to a color to match the surrounding landscape.

2.2. Description of Alternatives Analyzed in Detail:

2.2.1. No Action Alternative

The No Action Alternative would be to deny the BLM's ROW request and the repeater site would not be installed. Use of mobile temporary repeaters would continue to be used for special events on the playa.

2.3. Alternatives Considered but not Analyzed in Detail

One alternative identified during internal inter-disciplinary team scoping was to locate the radio repeater communication site on or near an existing communications tower at Trego. A propagation study was completed Figure 2.3, "Trego Propagation Study" (p. 11)and shows the radio frequency would not reach the Black Rock Station. Additionally, if it was ever determined to tie the radio site into the Central Nevada Dispatch Center, it would not have a radio path back to Winnemucca Mountain. This alternative did not meet the purpose of the proposed action and therefore was dismissed from further analysis.

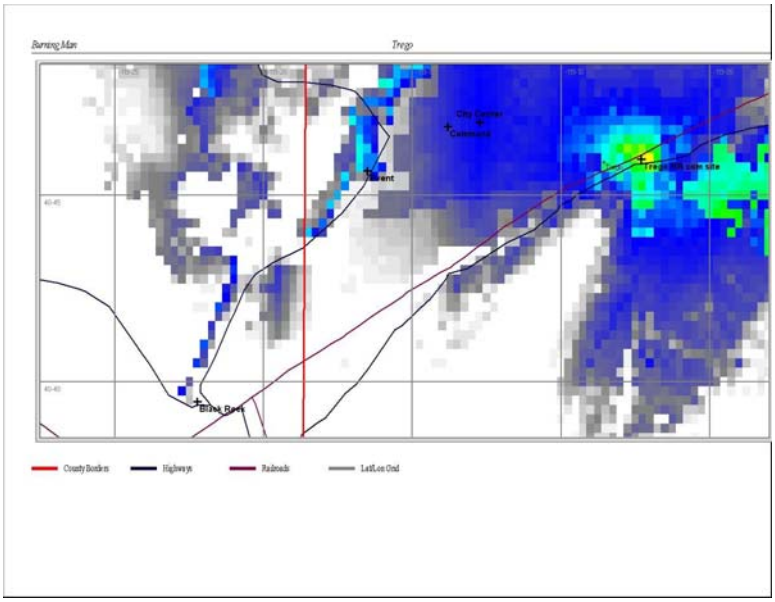

Figure 2.3. Trego Propagation Study

2.4. Conformance

The proposed action and alternative described in this Environmental Assessment (EA) are in conformance with the Sonoma-Gerlach Management Framework Plan, section, *L.4.2 Multiple Use Recommendation, which* states: "BLM will provide for communication sites on public land by using existing sites when frequencies are compatible. To develop new communication sites only when environmental or technical problems on existing sites are incompatible with new applications. New site development and road construction will be permitted only when no feasible alternative can be used on the following mountain ranges: Fox Range, Buffalo Hills, Granite Range, Calico Range, Black Rock Range, Selenite Range, Sonoma Range, Tobin Range, East Range, Stillwater Range, Humboldt Range, and West Humboldt Range."

2.5. Relationship to Laws, Regulations, and Other Plans

The Proposed Action and alternatives have been reviewed for compliance with BLM policies, plans, and programs. Authorized ROWs on BLM administered land are granted through the FLMPA (Section 501, 507), BLM ROW Regulations at 43 CFR 2800, and the BLM Manual MS-2800 though MS-2809. BLM ROW policy is extracted and implemented from these affecting regulations.

Although the proposed communication site is located on public lands, the location of the communication site (Project Area) is zoned according to the Pershing County Master Plan of 2002 and is primarily classified as AMR lands, Agricultural, Mining, and Recreation.

Chapter 3. Affected Environment:

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3.1. Introduction

The Project would occur on public lands administrated by the BLM. Public lands under BLM jurisdiction are managed for the multiple uses of range, forestry, watershed, mineral extraction, recreation, wilderness, and wildlife habitat. Land uses within the Project Area and vicinity include recreational activities, livestock grazing, and wildlife habitat.

3.2. Supplemental Authorities (Formerly referred to as Critical Environmental Elements of the Human Environment)

To comply with the National Environmental Policy Act, the following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in analyzing the effects of a proposed action and alternatives. Not all of the critical elements that require inclusion in this EA will be present, or if they are present, may not be affected by the proposed action and alternative. Only those mandatory critical elements that are present and affected, or need to be considered, are described in this section. Table 3.1-1 identifies the supplemental authorities (formally referred to as the critical elements of the human environment) and whether each is not present, present and not affected, or present and potentially affected. Table 3.1-2 identifies additional affected resources that are present and potentially affected within the Project Area.

Table 3.1. Supplemental Authorities (Critical Elements of the Human Environment)

Supplemental Authorities	Not Present	Present, Not Affected	Present, Potentially Affected	Rationale
Air Quality		X		The Proposed Action is not located in an area of non-attainment or areas where total suspended particulates exceed Nevada air quality standards. Area of disturbance would be small and temporary.
Areas of Critical Environmental Concern (ACECs)	X			
Cultural Resources			X	
Environmental Justice	X			
Floodplains	X			
Noxious Weeds, Invasive and Nonnative Species	X			However, potential for invasion.
Migratory Birds			X	
Native American Religious Concerns		X		See sectionSection 3.2.3, “Native American Religious Concerns” (p.)
Prime or Unique Farmlands	X			
Threatened & Endangered Species	X			See sectionSection 3.2.5, “Threatened and Endangered Species” (p. 18)
Wastes, Hazardous or Solid	X			
Water Quality (Surface/Ground)	X			
Wetlands and Riparian Zones	X			

Wild and Scenic Rivers	X			
Wilderness	X			

Table 3.2. Additional Affected Resources

Additional Affected Resources	Not Present, Not Affected	Present, Potentially Affected	Comments
Lands with Wilderness Characteristics	X		
Paleontological Resources		X	
Recreation		X	
Soils		X	
Special Status Species		X	
Vegetation		X	Due to the relationship between soils and vegetation, this resource is discussed under soils.
Visual Resources		X	
Wildlife		X	

The supplemental authorities identified in Table 3.1, “Supplemental Authorities (Critical Elements of the Human Environment)” (p. 15) and the additional affected resources identified in Table 3.2, “Additional Affected Resources” (p. 16) as being not present or present and not affected will not be analyzed further in this document.

3.2.1. Cultural Resources

A cultural resource inventory of the proposed repeater station was conducted by BLM staff on June 26, 2012. No cultural resources were identified at the proposed location. The centerline of the route of the historic Nobles Trail passes at a distance of ¾ mile east and at a lower elevation from the proposed repeater location. The trail is located within the Black Rock Desert/High Rock Canyon Emigrant Trails National Conservation Area (NCA); the western NCA boundary is very close to the proposed location. The Nobles Trail is part of the National Historic Trail known as The California National Historic Trail. All segments of the Nobles Trail within the NCA are considered to be high potential segments. There are no other known cultural resources eligible for listing in the National Register of Historic Places within one mile of the proposed Project Area.

3.2.2. Migratory Birds

Migratory bird" means any bird listed in 50 CFR 10.13. All native birds commonly found in the United States, with the exception of native resident game birds, are protected under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et seq.). The MBTA prohibits taking of migratory birds, their parts, nests, eggs, and nestlings without a permit. Executive Order 13186 signed January 10, 2001, directs federal agencies to protect migratory birds by integrating bird conservation principles, measures, and practices.

Occupied nests are those nests repaired or tended in the current year by a pair of raptors. Presence of raptors (adults, eggs, or young), evidence of nest repair or nest marking, freshly molted feathers or plucked down, or current year’s mute remains (whitewash) suggests site occupancy. Additionally, all nest sites within a nesting territory are deemed occupied while raptors are demonstrating pair bonding activities and developing an affinity to a given area (USFWS 2002).

A nest remains occupied throughout the periods of initial courtship and pair bonding, egg laying, incubation, brooding, fledging, and post fledging dependency of the young.

The proposed facility location is located in Inter-mountain basis mixed salt desert scrub habitat (Regional Gap Analysis Data (ReGap) S065. This land specific area is extremely dry. Table 3.3, "Avian Species Commonly Associated with Inter-mountain salt desert scrub habitat" (p. 17)lists some migratory birds and raptors typically associated with this habitat.

Table 3.3. Avian Species Commonly Associated with Inter-mountain salt desert scrub habitat

Common Name	Scientific Name	Sensitive Species
Northern goshawk	Accipter gentilis	X
Black-throated Sparrow	*Amphispiza bilineata*	
Golden eagle*	*Aquila chrysaetos*	X
Red-tailed hawk	*Buteo jamaicensis*	
Common Nighthawk	*Chordeiles minor*	
Northern harrier	*Circus cyaneus*	
Turkey vulture	*Cathartes aura*	
Common raven	*Corvus corax*	
Horned lark	*Eremophila alpestris*	
American kestrel	*Falco sparverius*	
Say's Phoebe	*Sayornis saya*	
Loggerhead shrike*	*Lanius ludovicianus*	X
Spotted towhee	Pipilo maculatus	
Rock wren	*Salpinctes obsoletus*	
Western meadowlark	*Sturnella neglecta*	

* Documented as being in the area (NDOW)

3.2.3. Native American Religious Concerns

In accordance with the National Historic Preservation Act (P.L. 89-665), the NEPA, the FLPMA (P.L. 94-579), the American Indian Religious Freedom Act (P.L. 95-341), the Native American Graves Protection and Repatriation Act (NAGPRA) (P.L. 101-601) and EO 13007, the BLM must provide affected tribes an opportunity to comment and consult on the proposed communication site. The BLM must attempt to limit, reduce, or possibly eliminate any negative impacts to Native American traditional/cultural/spiritual sites, activities, and resources.

On June 18, 2012, letters providing information related to the Proposed Action were sent to Summit Lake Paiute Tribe, Pyramid Lake Paiute Tribe, Susanville Indian Rancheria and the Winnemucca Tribe. To date, no traditional cultural properties or EO 13007 sites have been identified within the Project Area that might be impacted by the Proposed Action or alternatives.

An informational meeting was held with the Summit Lake Paiute Tribe on June 16, 2012 and this project was introduced to them. At the meeting no relevant concerns were brought forward. To date, no traditional cultural properties or EO 13007 sites have been identified within the Project Area that might be impacted by the Proposed Action or alternatives.

3.2.4. Noxious Weeds, Invasive and Nonnative Species

The BLM identifies target noxious weeds from the USDA Federal Noxious Weed List (USDA 2011) and the Nevada State Noxious Weed List (Nevada Department of Agriculture 2011). From these lists, 47 invasive, nonnative plant species are present in Nevada that require control. Of

these, 13 species have been inventoried and are known to occur in the Winnemucca District (BLM 2011). The Project Area is somewhat devoid of vegetation, including noxious weeds. A weed inventory for the Project Area has not been conducted; however, weed inventories were conducted for the Black Rock NCA Administrative Facility located at the south end of the playa documented several occurrences of the noxious weed, Russian knapweed (Acroptilon repens), along County Road 34 and perennial pepperweed (Lepidium latifolium) along Nevada State Route (SR) 447 (BLM 2009).

3.2.5. Threatened and Endangered Species

There are no known threatened or endangered (T&E) species nor is the habitat conducive for T&E species to be present in the proposed facility area. In 2010 the United States Fish and Wildlife Service designated the Greater sage-grouse as a candidate species. This species remains on the BLM's list of sensitive species and is addressed in section 3.2.9??? (p.).

Additional Affected Resources

3.2.6. Paleontology

The BLM manages paleontological resources under a number of federal laws including the following: FLPMA Sections 310 and 302(b), which direct the BLM to manage public lands to protect the quality of scientific and other values; 43 CFR 8365.1-5, which prohibits the willful disturbance, removal, and destruction of scientific resources or natural objects; and 43 CFR 3622, which regulates the amount of petrified wood that can be collected for personal, noncommercial purposes without a permit.

The Project Area is in a zone considered to have very low potential to contain significant paleontological resources. It is in a geological unit that is not likely to contain recognizable fossil remains.

3.2.7. Recreation

The main recreational activities that occur within the vicinity of the Project Area are dispersed and include camping, hiking, sightseeing, equestrian use and rock and mineral collection. Dispersed users of the proposed facility area are generally seeking solitude in the vast undeveloped region.

Although few recreational activities are expected to occur within the Project Area boundary, there are numerous activities that occur coincident with or adjacent to the Project Area. The adjacent Black Rock Desert playa is administered as a Special Recreation Management Area (SRMA) and is located in the Front Country visitor management zone. The SRMA and Front Country designation reflect the need for intensive planning and management for recreation opportunities and resource protection.

3.2.8. Soils and Vegetation

The site and associated existing access road lie primarily in the Stony Slope , 4-8' precipitation zone (PZ) with a small section of the access road in the Loamy 4-8" PZ Ecological Site. Water

erosion potential is primarily low to very little moderate. Wind erosion potential is also primarily low to very little moderate.

Expected vegetation community would be shadscale/black greasewood with indian ricegrass, sparsely distributed.

3.2.9. Special Status Species

Three BLM special status species have been documented as being within a 5 mile radius of the proposed repeater site. A golden eagle (Aquila chrysaetos) nest is within 1.5 miles (NDOW); silver-haired bat (Lasionycteris noctivagans) within 2 miles (NNHP), and a Northern goshawk (Accipiter gentilis) has been sited (flying) within 3 miles. The site could also provide limited foraging habitat for Loggerhead shrike. Year 'round habitat for bighorn sheep (Ovis canadensis) is within .3 miles (NDOW).

There are a few abandoned mines or adits in the area that could potentially provide habitat for bats. Table 3.4, "BLM Special Status Bat Species Potentially Utilizing the Project Area" (p. 19)lists those special status bat species that could potentially be in the area.

Table 3.4. BLM Special Status Bat Species Potentially Utilizing the Project Area

Common Name	Scientific Name
Pallid bat	Antrozous pallidus
Silver-haired bat*	Lasionycteris noctivagans
Spotted bat	Euderma maculatum
California myotis	Myotis californicus
Western Small-footed myotis	Myotis ciliolabrum
Fringed myotis	Myotis thysanodes
Western pipistrelle	Pipistrellus hesperus

The proposed facility location is not within or directly adjacent to Preliminary Priority Habitat (PPH) or Preliminary General Habitat (PGH) for Greater sage-grouse. PPH are areas offering the highest quality Greater sage-grouse habitat based on bird density, lek location, community composition, intactness, or other variables. PGH are areas of relatively intact sagebrush communities which provide certain habitat requirements for greater sage-grouse.

3.2.10. Visual Resources

The BLM manages visual resources on lands within its jurisdiction with the Visual Resource Management (VRM) system. The VRM system provides a means to identify visual values, establish objectives for managing these values, and provide information to evaluate the visual effects of proposed projects.

BLM lands are classified as one of four VRM classes, representing levels of visual susceptibility to impact. VRM classes are typically assigned to public land units through the use of the visual resources inventory classes in the BLM's land use planning process (Sonoma-Gerlach MFP, 1982). Impact thresholds for the four VRM classes are as follows (BLM Handbook H-8431-1):

- **Class I** refers to special designation areas such as Wilderness areas, only. Class I areas should be managed so that contrast of proposed actions is not evident to the casual observer.

- **Class II** areas should be managed so that contrast of proposed actions is weak (visible but does not attract attention).
- **Class III** areas should be managed so that contrast of proposed actions is moderate (begins to attract attention and begins to dominate the landscape).
- **Class IV** areas can accommodate strong contrast (demands attention, cannot be overlooked, dominates the landscape).

The study area for visual resources is defined as the viewshed of the project, or the areas from which the project can be seen. The viewshed includes portions of the Granite Range, Black Rock Desert, Black Rock Range, Jungo Road and Selenite Range.

The Project Area was inventoried by the BLM for the Sonoma-Gerlach MFP as a Visual Management Class II area (BLM 1982). A management activity in this class may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in predominant natural features of the characteristic landscape.

High sensitivity viewpoints within the visual assessment area include the Applegate-Lassen Emigrant Trail, a major pioneer wagon route and national historic trail; the Nobles Trail; and other nationally-designated or eligible historic sites. Goals 1 of the Black Rock Desert-High Rock Canyon NCA Resource Management Plan is to "preserve opportunities for solitude and primitive experiences within the viewshed of historic emigrant and exploration trails." Preservation of the visual integrity of the emigrant trail viewsheds is thus a primary visual objective in the study area.

3.2.11. Wildlife

In addition to birds, the habitat could also support mammals and herpetofauna typically found in the Great basin such as whitetail antelope squirrel (*Ammospermophilus leucurus*), desert woodrat (*Neotoma lepida*), longtail pocket mouse (*Perognathus formosus*), pinon mouse (*Peromyscus nuttalli*) and other small rodents, blacktail jackrabbit *(Lepus californicus*) , coyote (*Canis latrans*), horned lizards (*Phrynosoma spp*.) Great Basin fence lizard (*Sceloporus occidentalis longipes*), Great Basin collared lizard (*Crotaphytus bicinctores*), and Great Basin rattlesnake (*Crotalus oreganus lutosus*). The proposed site could be subjected to very limited use by Mule deer (*Odocoileus hemionus*) and Pronghorn (*Antilocarpa Americana*).

Chapter 4. Environmental Effects:

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The direct and indirect effects of the Proposed Action and the No Action Alternative on resources present and brought forward for analysis are discussed in this section. Cumulative impacts are discussed separately in Chapter 5. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR 1508.8).

Supplemental Authorities

4.1. Proposed Action

4.1.1. Cultural Resources

The historic route of the Nobles Trail passes within an approximate distance of ¾ mile from the Project Area. The trail is located within the Black Rock Desert/High Rock Canyon Emigrant Trails National Conservation Area (NCA); the western NCA boundary is very close to the proposed location. The NCA was established in large part to protect the setting of several historic trail routes (one of which is the Nobles Trail), that pass through the area. If the placement of the repeater were to have a significant impact to the trail setting (as viewed from the trail itself), it could constitute an adverse effect on a National Register historic property.

In order to evaluate the effect of the presence of the repeater and its tower on the setting of the historic trail, BLM staff conducted a rough simulation by erecting a cardboard tube on the hillside at the proposed repeater location and viewed it from the actual trail location. The cardboard tube was approximately eighteen inches in diameter and 12 feet in height. The actual tower on the repeater would be less than one foot in diameter and 20 feet in height with a small diameter 4 foot high antenna. As is clear from the photo in Figure 4.1, “Visual Simulation using Cardboard Tube” (p. 24) the cardboard tube is difficult to see from the closest point between the trail and the proposed repeater location. The repeater building and the tower is currently a grey/beige color, once erected it may be painted to blend into the surrounding landscape. Although the simulated conditions are not the same as the actual conditions would be, the viewer can extrapolate a rough impression of how the finished facility would appear to a traveler along the historic trail. At the closest location to the repeater on the Nobles Trail the repeater and the tower appear on the horizon but the small diameter of the tower and the antenna render the view barely visible. The existing character of the landscape would remain unchanged after placement of the repeater. While the repeater and tower may be visible, they would not attract attention and because the color would blend in with the landscape, the level of change repeats the basic elements found in the landscape. The degree of contrast between the repeater station and tower and the surrounding landscape would be considered “weak”.

Figure 4.1. Visual Simulation using Cardboard Tube

In addition to the structure and the tower and attached antenna, the south face of the structure would display two solar panels. It is possible that the solar panels, could, at times of the day reflect the sun in a manner visible to travelers along the historic trail. However, the south side of the structure is not heavily exposed to the trail and if reflections were visible, they would likely be visible along a very small segment of the trail and the amount of surface visible at the distance of ¾ mile would be very small, judging from the amount of visibility of the cardboard tube.

4.1.2. Migratory Birds

Environmental protective measures to offset consequences to migratory birds and raptors have been defined in Chapt. 2Sec_EnvirPropMeasure (p.). No adverse effects to migratory birds as a result of this project are anticipated because of implementation of those measures. Installation of the facility may provide additional nesting and or perching sites for birds.

The immediate project area is densely covered with rocks of various sizes and sparsely interspersed with few, low-growing clumps of grasses. The area is devoid of shrubs. Thus, the potential for migratory bird ("songbird") nests is negligible. Some of the larger rock areas could provide nesting sites for raptors although no nests or nesting activity was observed by a BLM biologist in the area in June, 2012. Animals in general, tend to acclimate to human structures more readily than to the presence of humans. Birds that may use the area would be expected to acclimate to the building.

4.1.3. Native American Religious Concerns

None of the tribes contacted have brought any relevant concerns forward on the proposed action.

4.1.4. Noxious Weeds, Invasive and Nonnative Species

Impacts from the Proposed Action could allow for the establishment of new non-native species in the Project Area. Environmental protective measures to offset potential for establishment of noxious weeds, invasive and nonnative species have been defined in Chapt. 2Sec_EnvirPropMeasure (p.). Indirect effects resulting from invasive, nonnative species could occur along access roads and travel routes.

4.1.6. Additional Affected Resources

No effect to paleontological resource is anticipated as a result of the proposed repeater project, due to the low potential for the presence of fossils and to the small amount of proposed disturbance.

4.1.7. Recreation

Although few recreational activities are expected to occur within the project area boundary, the proposed action has the potential to effect dispersed recreation. The Black Rock Desert playa is a remote area that attracts many users who are seeking solitude. During installation of the proposed facility, an unknown number of users may be displaced to other dispersed recreation areas. Displacement increases use in other areas and increases the potential for use related impacts in those areas.

Numerous recreation activities would continue to occur coincident with or adjacent to the project area. The adjacent Black Rock Desert playa is administered as a Special Recreation Management Area (SRMA) and is located in the Front Country visitor management zone. The SRMA and Front Country designation reflect the need for intensive planning and management for recreation opportunities and resource protection. The proposed repeater would provide year round communication support for playa-based events, and radio coverage for law enforcement personnel (who provide support at recreation events) would improve.

4.1.8. Soils and Vegetation

Due to lack of any new soil surface disturbance anticipated incremental to no impacts are expected to soil structure and function or to existing vegetation communities.

4.1.9. Special Status Species

Refer to identified to Special Status Species in Chapter 3 section 3.9.

The following is a synopsis of the evaluation of the potential impacts on those species.

Golden eagle: Installation of the facility would take place during the breeding/nesting season of golden eagles. However, the proposed installation site is 1.5 miles from the documented nest which is well over the recommended buffer distance defined in the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances 2002.* The siting of this single tower would not create a flight collision hazard because of its low height and lack of guy wires.

Bats: Although there are few abandoned mines in the area that could provide habitat (cover) for bats, water is very limited. Consequently, large populations of bats are not expected to live in the area. Bat usage to the immediate area of the proposed repeater site would be limited to foraging. However, given the sparseness of vegetation and scarcity of water sources, any foraging activity would be minimal. The facility would not be lighted (which will not attract insects) and therefore will not draw bats to the area. The tower does not pose a collision risk.

Northern goshawk: The tower site and surrounding area does not offer the nesting habitat components preferred by northern goshawks. The documented sighted hawk (3 miles from the

proposed tower site) was probably foraging. The low height of the tower and lack of guy wires would not create a flight collision hazard should the goshawk forage in the immediate area.

Loggerhead shrike: The loggerhead shrike can be found in a variety of habitats throughout the Great Basin, but is most commonly found in areas with sagebrush or other shrubs with which it can impale its prey upon. The vegetation at the proposed repeater site and surrounding area is primarily comprised of sparse, low clumps of grass. The loggerhead's use of the area would most likely be transient in nature. Because the tower is not lighted, is relatively short, and is unguyed, it does not pose a collision risk to the shrike. Pre-construction surveys for migratory birds as defined in Chapter 2, would ensure no harm would come to this species from the installation of the repeater facility.

Bighorn Sheep: Environmental protective measures to offset consequences to bighorn sheep have been defined in chapter 2. No adverse effects to these species as a result of the proposed action are anticipated because of implementation of those measures.

Greater sage-grouse The proposed facility location is not within or directly adjacent to Preliminary Priority Habitat (PPH) or Preliminary General Habitat (PGH) for Greater sage-grouse. The boundary of an identified tract of PGH is approximately one (1) mile from the proposed facility site, on the western slope of the Granite mountain range.

The proposed facility site is approximately 4343' in elevation. The elevation of the Granite mountain range that lies between the PGH boundary and the proposed facility site is approximately 5085' thus creating a physical and visual barrier between the two sites. The repeater facility does not create perching opportunities for Greater sage-grouse predation because of its nominal height and the barrier created by the mountains. No change in greater sage-grouse use of the PGH is expected as a result of the facility installation.

4.1.10. Visual Resources

The proposed action would be consistent with a Class II contrast criteria applicable to the visual assessment area. At distances of ¾ mile or more (the approximate distant at which the Nobles Trail passes the project area), the proposed action would not be evident to casual day time observer. The design features (e.g., color, location) of the repeater would greatly reduce potential impacts to visual resources from the visual contrast created between the proposed action and the existing landscape elements (form, line, color and texture) and features (land surface and vegetation). The level of change to the characteristic landscape would be relatively low, and the existing character of the landscape would be retained.

4.1.11. Wildlife

The immediate project area is densely covered with rocks of various sizes and sparsely interspersed with few, low-growing clumps of grasses. The area is devoid of shrubs. Many of the rocks are arranged in a manner that creates cover (crevices and burrows) for reptiles and small mammals. Several lizards and a desert cottontail (*Sylvilagus auduboni)* were observed by a BLM biologist in June, 2012. There would be a slight risk of mortality or temporary displacement during the installation phase of the proposed project. However, measures defined in Chapter 2 greatly reduce the potential for animals to be impacted by the Proposed Action.

Larger mammals such as coyotes and fox may hunt in the area, but the barren nature of the area does not create suitable habitat for concealment or dens. Pronghorns and mule deer are present, but most likely use the immediate project area as a route. The common animals that are found in this area, readily adapt to the presence of man-made structures and will not avoid the area because of the repeater facility.

4.2. No Action Alternative

Supplemental Authorities

4.2.1. Cultural Resources

Under the No Action Alternative, no impacts to Cultural Resources are expected.

4.2.2. Migratory Birds

Under the No Action Alternative, no impacts to Migratory Birds are expected.

4.2.3. Native American Religious Concerns

No impacts to Native American Religious Concerns are expected.

4.2.4. Noxious Weeds, Invasive and Nonnative Species

Under the No Action Alternative, no impacts to Noxious weeds, Invasive and Nonnative species are expected.

4.2.5.

Additional Affected Resources

4.2.6. Paleontology

No effects to paleontological resource is anticipated as a result of the No Action Alternative.

4.2.7. Recreation

Under the No Action Alternative, the installation of a permanent repeater would not occur, and users would not be displaced to other dispersed recreation areas. Numerous recreation activities would continue to occur coincident with or adjacent to the project area. The use of temporary repeaters, to provide communication coverage for large-scale recreation activities, would continue to occur on a case-by-case basis. Year round communication support for playa-based events would not exist, and radio coverage for law enforcement personnel (who provide support at recreation events) would remain problematic.

4.2.8. Soils and Vegetation

Under the No Action Alternative, status quo of existing conditions would continue.

4.2.9. Special Status Species

Under the No Action Alternative, no impacts to Special Status Species are expected.

4.2.10. Visual Resources

Under the No Action Alternative, no impacts to Visual Resources are expected. The visual integrity of the assessment area would remain unchanged.

4.2.11. Wildlife

Under the No Action Alternative, no impacts to Wildlife are expected to occur..

Chapter 5. Cumulative Impacts

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The Council on Environmental Quality (CEQ) regulations that implement NEPA define a cumulative impact as: "The impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions." Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

As required under the NEPA and the regulations implementing the NEPA, this chapter addresses those cumulative effects on the environmental resources in the Cumulative Effects Study Area (CESA) which could result from the implementation of the Proposed Action and No Action Alternative. The extent of the CESA would vary with each resource, based on the geographic or biologic limits of that resource. As a result, the list of projects considered under the cumulative analysis may vary according to the resource being considered. In addition, the length of time for cumulative effects analysis would vary according to the duration of impacts from the Proposed Action on the particular resource.

5.1. Assumptions for Cumulative Analysis

Direct and indirect consequences of the Proposed Action were evaluated previously in Chapter 4 for the various environmental resources. Analyzed in this chapter are those resources from Chapter 4 that have the potential to be incrementally impacted by the Proposed Action within the identified Cumulative Effects Study Areas (CESA). Based on the preceding analysis in Chapter 4, no cumulative impacts are expected for the following resources: Native American Religious Concerns, T&E, and Paleontological Resources. Resources have been grouped where similar cumulative impacts are expected.

Description of CESA Boundaries

Visual

The Visual Cumulative Effects Study Area (Visual CESA) was developed to assess potential cumulative impacts to the Black Rock Desert and the National historic trails. The Visual CESA described as view-shed area identified for this project was created by identifying the proposed location of the radio repeater site and projecting a visual simulation from the approximate tower height and elevation of the site on the Black Rock Desert. This CESA was developed to assess potential cumulative impacts to cultural, recreation, and visual resources. The area encompasses approximately 182,603 acres of public and private lands.

Wildlife

The Wildlife Cumulative Effects Survey Area (Wildlife CESA) is much smaller in size as opposed to the Visual CESA, approximately 1,801 acres of public land. This CESA was developed to assess potential cumulative impacts to noxious weeds, invasive and nonnative species; migratory birds; special status species; wildlife; soils; and vegetation.

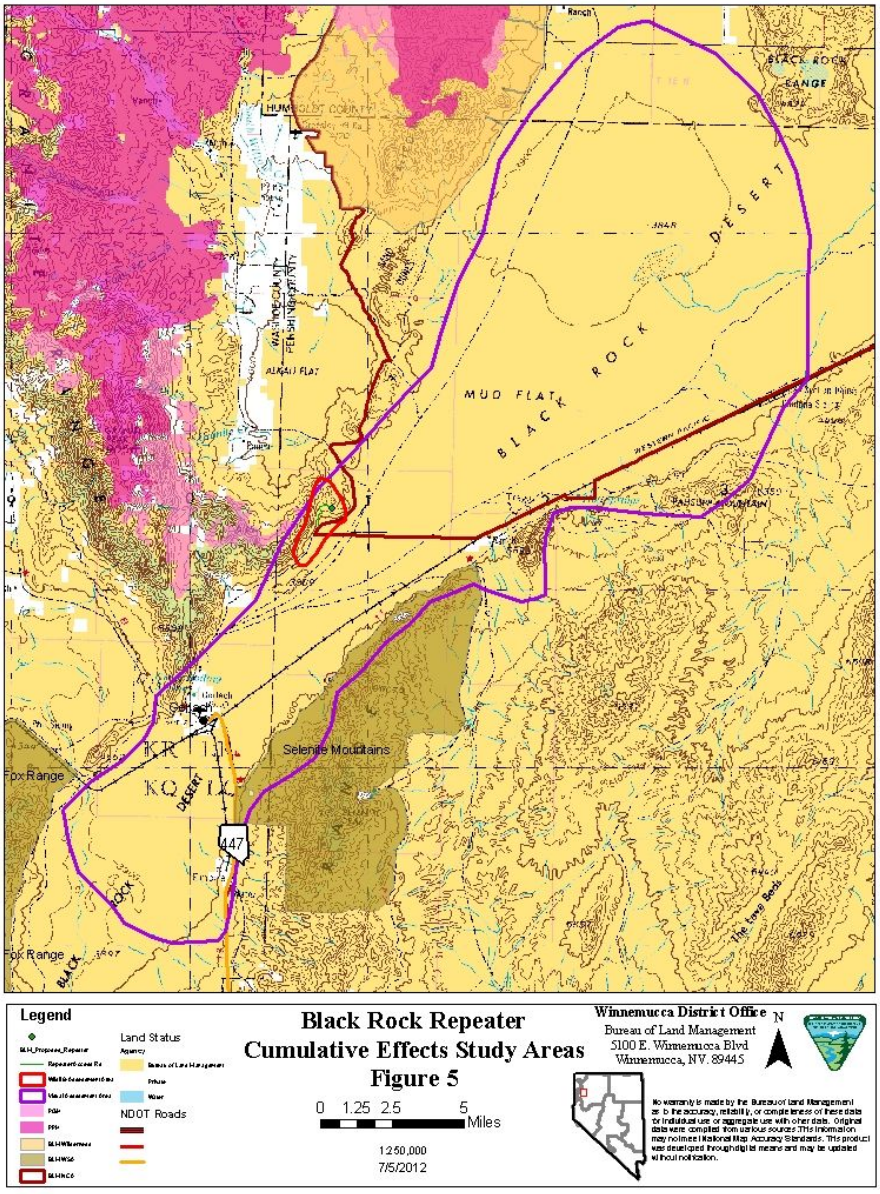

Figure 5.1. Cumulative Effects Study Areas

Resource	CESA Name	CESA Size
Recreation, Cultural, Visual Resources	Visual CESA	182,603 acres
Noxious Weeds, Invasive and Nonnative Species, Wildlife, Soils, Vegetation, Migratory Birds	Wildlife CESA	1,801 acres

5.2. Past and Present Actions

On the basis of aerial photographic data, BLM Legacy Rehost 2000 database (which records lands and mineral actions) reports ran in July 2012, agency records and current agency GIS records and analysis, the following past and present actions, which have impacted the assessment area

to varying degrees, have been identified: geothermal exploration and development, various dispersed recreation activities, visitors, wild horse and burro gathers, livestock grazing, mineral material sales, film permits and various rights-of-way authorizations, such as railroads, power lines, roads and pipelines.

5.3. Future Actions

Past and present actions discussed above are expected to continue into the foreseeable future, though the relative intensity of these actions could vary depending on a variety of economic and other factors.

Visual CESA

It is expected that dispersed and permitted recreation activities such as the Burning Man event, visitors, film permit authorizations, rights-of-way, and livestock grazing would continue and could increase in the future.

Wildlife CESA

It is expected that dispersed recreation, a communication equipment right-of-way and continued vehicle traffic would continue in this area.

5.4. Cumulative Impacts to Affected Resources

Impacts associated with past, present, and reasonably foreseeable future actions are generally created by ground or vegetation-disturbing activities that effect natural and cultural resources in various ways. Of particular concern is the *accumulation* of these impacts over time. This section of the EA considers the nature of the cumulative effect and analyzes the degree to which the proposed action and alternatives contribute to the collective impact.

5.4.1. Cultural Resources

No identified past or present actions or future reasonably foreseeable actions are likely to substantially affect cultural resources. Burning Man activities are temporary and the activities on the playa have a low potential to affect cultural resources. Activities from the large numbers of visitors in the surrounding area are more likely to affect cultural resources by way of illegal artifact collection or ground disturbance at surrounding points of interest. The Burning Man EA has addressed this potential by posting monitors during the periods before, during, and after the Burning Man event. The presence of monitors should minimize any potential damage to cultural resources.

5.4.2. Noxious weeds, Invasive and Nonnative Species

Except for the initial construction of the existing road, human disturbance in the Wildlife CESU appears to have been superficial from historical accounts and current remote imagery. Anticipated impacts, in the future, from the general public should not change. Also due to minimal disturbance from initial portable repeater placement and subsequent infrequent maintenance schedules and mitigation measures, potential future establishment of noxious weeds, invasive and nonnative species in the CESA is not expected.

5.4.3. Migratory Birds, Special Status Species, and Wildlife

Past mining events in the cumulatively affected area have created potential habitat for bats. The annual "Burning Man" event undoubtedly temporarily alters wildlife usage of the area, and could have destroyed and continue to destroy any Playa phacelia plants. Because of the recreational use of the playa and the proximity of the area to the NCA, human disturbance and/or structures have been somewhat limited to the town of Gerlach. Other than a long-ago road and cleared area being created, there are no other signs of disturbance at the proposed repeater site and no other disturbance or construction is currently being conducted, thus wildlife and plants in the cumulative affected area are not presently being significantly impacted.

Tower location is an important variable to consider. Tall towers or towers placed on high ridgetops create more of an impact than smaller, less conspicuously placed towers. However, the proposed repeater tower should be considered when determining the structure and placement of any future towers as any additional towers contribute incrementally to cumulative effects. The BLM biologist is unaware of any other proposed towers in this area at this time.

The annual "Burning Man" event continues to draw an increasingly larger population of people.

Vandalism would not be unexpected and impacts to wildlife would increase as the number of participants increase. Various recreational uses of the playa will continue, but due to the proximity of this site to the WSA and NCA, long-term human disturbances (such as open pit mining and building construction) to wildlife and special status species would be anticipated to be minimal.

Because of the small dimensions of the repeater building, nominal height of the tower, lack of lights, lack of guy wires, brevity of the installation process, and infrequent maintenance trips (human disturbance), and with consideration of the environmental characteristics of the site itself, installation of the repeater facility would not substantially contribute to the cumulative effects of human activities to migratory birds, special status species, and general wildlife in this area. The facility may actually be of some benefit to birds in providing nesting and or perching sites.

There is the potential for a BLM special status plant, Playa phacelia (*Phacelia inundata*), to occur within the cumulative affected area, but not within in the project area. This plant is associated with playa environments, not the soil conditions at the proposed repeater site and therefore not impacted by the proposed action.

Pronghorns and mule deer are present in the cumulative affected area, but are most likely to only use the immediate project area as a route. The common animals that are found in this area, i.e. coyotes, rabbits, lizards, snakes, readily adapt to the presence of man-made structures and will not avoid the area because of the repeater facility. The small surface area required of the facility will not, at this point, cumulatively contribute to habitat loss.

5.4.4. Recreation

No identified past or present actions or future reasonable foreseeable actions are likely to sustantially affect recreation. It is expected that dispersed recreation would continue in the area; however, recreational use of the area may diminish for those who are seeking solitude.

5.4.5. Soils and Vegetation

Except for the initial construction of the existing road, human disturbance in to Soil and Vegetation, within the Wildlife CESA, appears to have been superficial from historical accounts and current remote imagery. As a result, due to minimal disturbance from portable repeater placement and infrequent maintenance schedules, incremental impact to soils and vegetation in the CESA is expected to be minimal.

5.4.6. Visual Resources

Reasonably foreseeable cumulative actions within the visual resources study area include various permitted dispersed recreation uses on the Black Rock Desert playa, visitors, film permit authorizations, rights-of-way, and livestock grazing. Permitted recreation activities, like Burning Man, could exceed applicable VRM Class II criteria. Exceedances would last the duration of the event and immediately before and afterwards, but would result in short term impacts to the area, no permanent or long-term cumulative impacts with appropriate post-event clean-up are expected. During installation of the radio repeater, a short-term impact to the visual CESA may occur due to the human activity of installation, but because the radio repeater would be placed back from the edge of the hill and painted a color to match the surrounding landscape long-term impacts are expected to be minimal.

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Chapter 6. Tribes, Individuals, Organizations, or Agencies Consulted:

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The BLM WDO sent a letter describing the project and requesting a consultation meeting was to the following tribes: Summit Lake Paiute Tribe, Susanville Indian Rancheria, Reno-Sparks Indian Colony, Pyramid Lake Paiute Tribe on June 18, 2012.

An informational meeting was held with the Summit Lake Paiute Tribe on June 16, 2012 and this project was introduced to them. At the meeting no relevant concerns were brought forward. To date, no traditional cultural properties or EO 13007 sites have been identified within the Project Area that might be impacted by the Proposed Action or alternatives.

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Chapter 7. List of Preparers

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Table 7.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Kathy Ataman	Archaeologist	Cultural and Paleontological Resources
Mark Hall	Archaeologist	Native American Religious Concerns
Robert Burton	Natural Resources Specialist	Noxious weeds, Invasive and Non Native Species, Soils, and Vegetation
Nancy Spencer-Morris	Wildlife Biologist	Migratory Birds, T&E, Special Status Species, Wildlife
Cory Roegner	Assistant Field Manager	Recreation, Visual Resources
Julie McKinnon	Realty Specialist	Lands and Realty, Project Lead
Kristine Struck	Wilderness Specialist	Lands with Wilderness Characteristics
Zwaantje Rorex	Planning and Environmental	NEPA Coordinator
Kathy Ataman		Black Rock Field Office Acting Field Manager

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Chapter 8. Consultation and Coordination

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Tribal Consultation:

The BLM WDO sent a letter describing the project and requesting a consultation meeting was to the following tribes: Summit Lake Paiute Tribe, Susanville Indian Rancheria, Reno-Sparks Indian Colony, Pyramid Lake Paiute Tribe on June 18, 2012. An informational meeting was held with the Summit Lake Paiute Tribe on June 16, 2012 and this project was introduced to them. At the meeting no relevant concerns were brought forward. To date, no traditional cultural properties or EO 13007 sites have been identified within the Project Area that might be impacted by the Proposed Action or alternatives.

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Chapter 9. References

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