

U.S. Department of the Interior
Bureau of Land Management
Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652

ENVIRONMENTAL ASSESSMENT

NUMBER

DOI-BLM-CO-N040-2012-0060-EA

CASEFILE NUMBER

BLM Rights-of Way COC75447 (I3B Pad Site) and COC75448 (Harvey Gap Site)

PROJECT NAME

Proposed Repeater Installations (Harvey Gap Communication Site and I3B pad) to Support Gas Gathering Telecommunications, Garfield County, Colorado

PAD LOCATION

Township 5 South, Range 91 West, Section 19, NW $\frac{1}{4}$, 6th P.M. (Harvey Gap Communication Site);
Township 7 South, Range 93 West, Section 3, SE $\frac{1}{4}$ NE $\frac{1}{4}$, 6th P.M. (I3B Pad).

APPLICANT

Summit Midstream (“Summit”) – currently DBA Grand River Gathering LLC
Contact: Renata Busch, 2100 McKinney Avenue, Suite 1250, Dallas, TX 75201

PROPOSED ACTION

Summit Midstream (“Summit”) proposes to install, operate, and maintain two communication repeater towers with associated antennas to gather, collect and send data between their existing compressor stations and custody transfer meters in the Mamm Creek gathering field and their field operations office in Rifle, Colorado.

A primary repeater tower (20 feet in total height and with 2-foot spacing between the three support legs) would be installed at the existing Harvey Gap Communication Site which would directly communicate with the all of the existing compressor stations in the field except for the Pumba Compressor (Figure 1). A secondary repeater tower would be installed adjacent to the existing I3B pad to relay the communication data between the Pumba Compressor and the proposed Harvey Gap tower (Figure 2). The I3B tower provides direct line-of-sight with the Harvey Gap tower, whereas the Pumba Compressor (located in NW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 10, T7S, R93W) is not afforded that direct line-of-sight.

Vehicle access exists to both proposed sites, although the road to Harvey Gap site is narrow and steep (reaching 25% grade in sections). Both access roads are in a relatively well-maintained condition. It is assumed that the concrete for the tower footers would be hand-mixed at the Harvey Gap site as the road is not sufficient to handle any vehicle bigger than a regular-sized pickup.

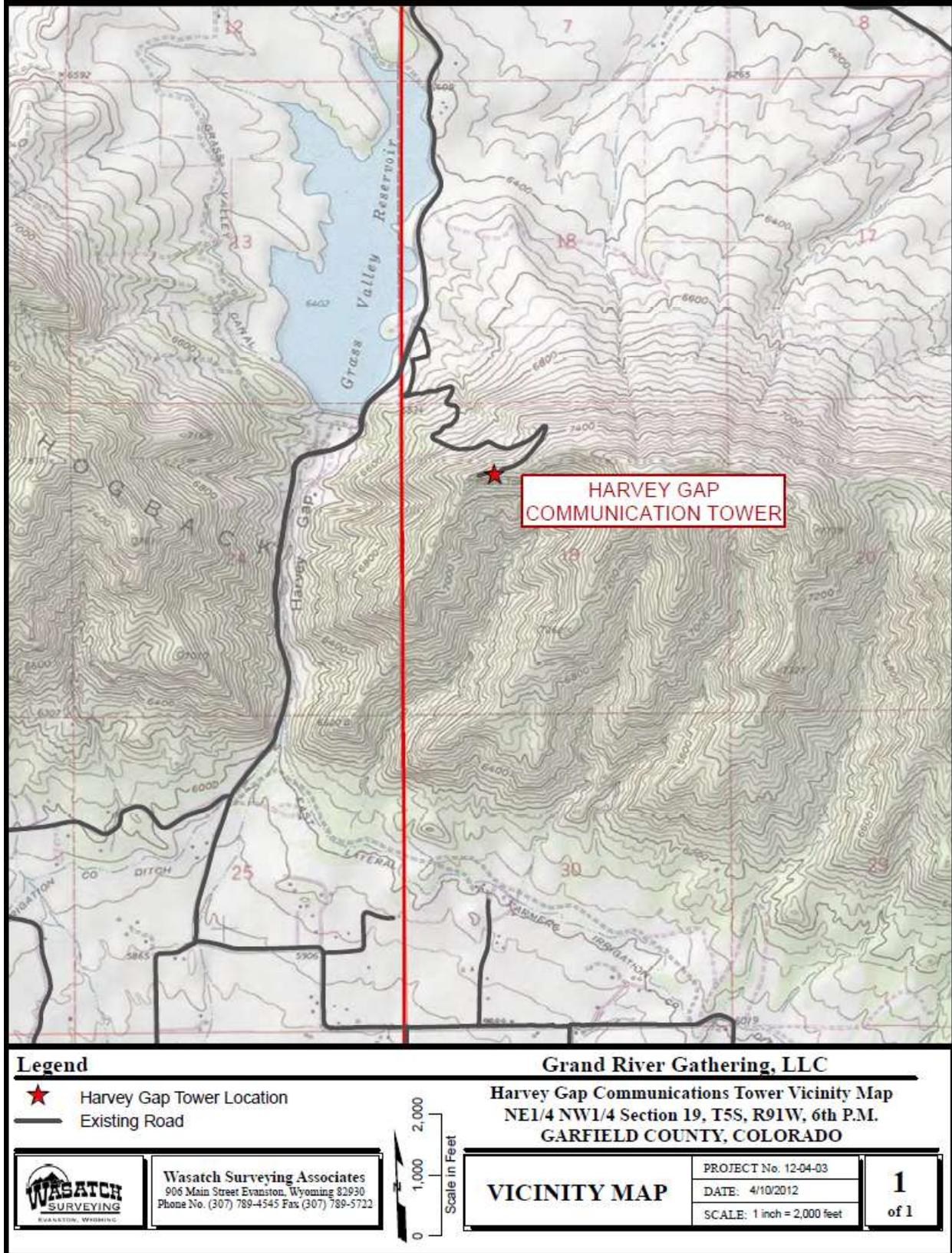


Figure 1. Vicinity Map for Harvey Gap Repeater Site Showing Access Road.

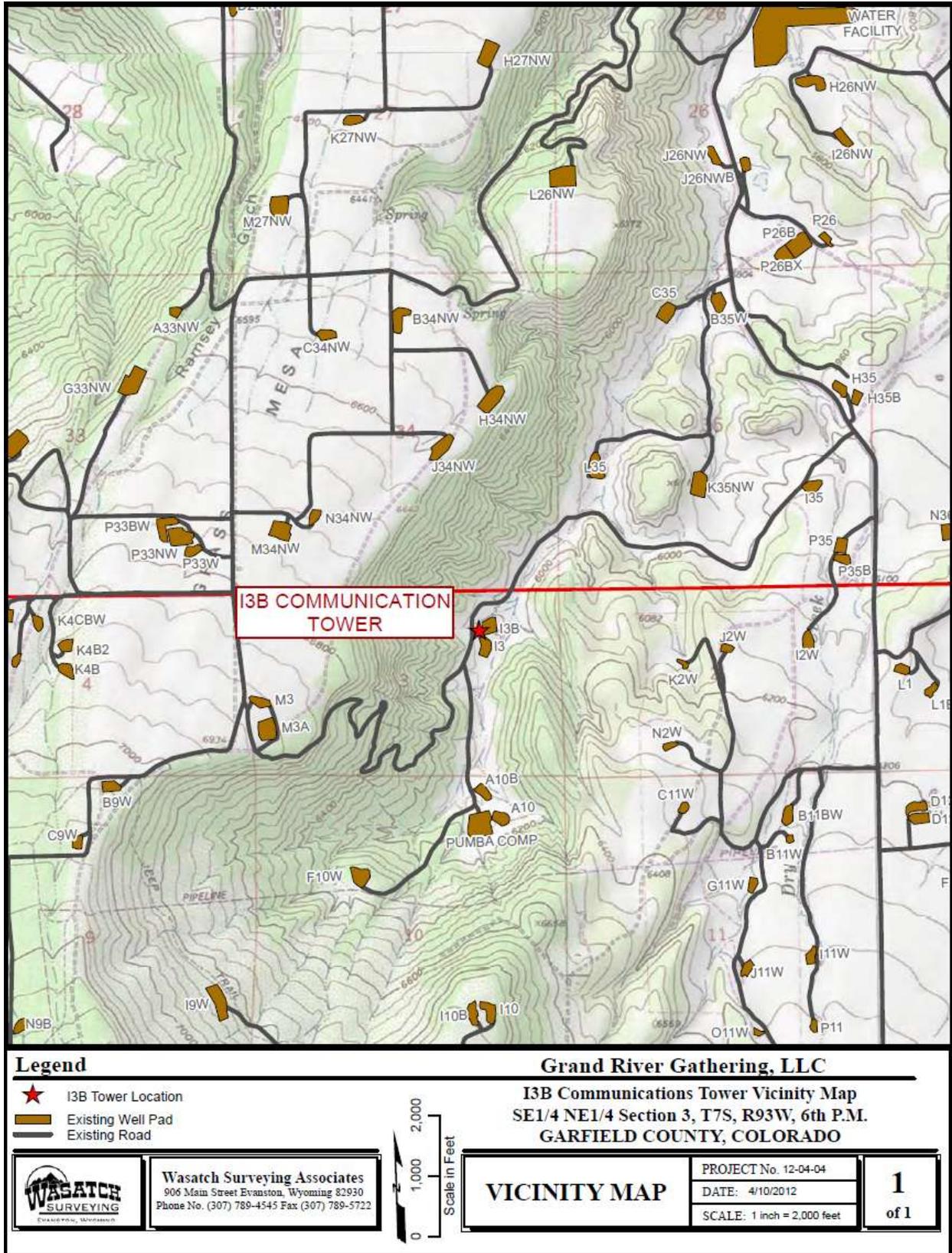


Figure 2. Vicinity Map for I3B Repeater Site Showing Access Road.

Harvey Gap Repeater Site Details

An existing Garfield County communication site is located at the terminus of the access road on the top of the Grand Hogback overlooking Grass Mesa Reservoir to the northwest. A suitably sized turnout is available at the end of the road for pickup-sized vehicles to negotiate a three-point turnaround. Directly west of the turnout, Summit would install a 20-foot-tall tower with four antennas. A concrete foundation would provide the footing for the tower. The tower would have three legs with 2-foot separation and would be constructed with non-reflective, all-weather galvanized materials. The area of disturbance for the tower footer and nearby solar panels would be 10 feet by 20 feet (0.005 acre). Batteries for backup power would be enclosed in a weather-proof utility box at the base of the tower.

I3B Pad Repeater Site Details

The proposed tower at the existing I3B pad located along the Pumba Compressor access road would be installed directly west of the pad working area. The existing Pumba access road is open to large vehicles year-round. Suitable space is available at the pad site to accommodate any planned tower installation work. The tower would be 20 feet in height, free-standing, and based in a concrete footer (5 feet by 5 feet). Proposed disturbance for the site would have dimensions of 30 feet by 26 feet (0.018 acre) with a maximum cut of 2.2 feet and maximum fill of 1.6 feet. The working area would include the tower with footer, an equipment cabinet (6 feet by 6 feet), and a solar power array with 8-foot by 12-foot concrete base. A 12-inch-diameter culvert would be installed near the southern edge of the tower site to provide improved accessibility.

Authorizing Actions and Relationship to Statutes and Regulations

Right-of-Way Grants COC75447 and COC75448 for tower repeaters would be granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761), which states: (a) The Secretary, with respect to the public lands (*including public lands, as defined in section 103(e) of this Act, which are reserved from entry pursuant to section 24 of the Federal Power Act (16 U.S.C. 818)*) [P.L. 102-486, 1992] is authorized to grant, issue, or renew rights-or-way over, upon, under, or through such lands.

Appendix A lists the specific Conditions of Approval (COAs) that would be implemented as mitigation measures for this project and attached as stipulations to the Right-of-Way Grants. The operator would be responsible for continuous inspection and maintenance of the access roads, towers ancillary facilities. Industry-standard Best Management Practices (BMPs) for resource protection including wildlife habitat provisions would also be employed throughout the project.

NO ACTION ALTERNATIVE

In accordance with Council on Environmental Quality (CEQ) regulations, the impacts of this alternative are evaluated in this EA to provide a baseline form comparison to impacts associated with the Proposed Action. Review of land status patterns in the vicinity of the project area indicate that Summit could not feasibly install the repeater towers without crossing or using Federal land. The No Action Alternative, consisting of denial of the Federal Right-of-Way Grant needed for Summit to complete the desired repeater installations, would therefore include none of the impacts associated with the Proposed Action.

PLAN CONFORMANCE REVIEW

The Proposed Action and No Action Alternative are subject to and have been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: The current land use plan is the *Glenwood Springs Resource Management Plan (RMP)*, approved in 1984 and revised in 1988 (BLM 1984). Relevant amendments include the *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) and the *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999a).

Decision Language: The 1991 Oil and Gas Plan Amendment (BLM 1991) included the following at page 3: “697,720 acres of BLM-administered mineral estate within the Glenwood Springs Resource Area are open to oil and gas leasing and development, subject to lease terms and (as applicable) lease stipulations” (BLM 1991, page 3). This decision was carried forward unchanged in the 1999 ROD and RMP amendment at page 15 (BLM 1999b): “In areas being actively developed, the operator must submit a Geographic Area Proposal (GAP) [currently referred to as a Master Development Plan, MDP] that describes a minimum of 2 to 3 years of activity for operator controlled leases within a reasonable geographic area.”

Discussion: The Proposed Action is in conformance with the 1991 and 1999 RMP amendments cited above because the Federal mineral estate proposed for development is open to oil and gas leasing and development. The 1999 RMP amendment requires multi-year development plans known at that time as Geographic Area Plans (GAPs) for lease development over a large geographic area. However, the 1999 RMP amendment also provides exceptions to that requirement for individual or small groups of exploratory wells drilled in relatively undrilled areas outside known high production areas. The Proposed Action, as such, is in conformance with the exception to the requirement to require operators to submit Master Development Plans (MDPs), previously known as Geographic Area Plans (GAPs).

STANDARDS FOR PUBLIC LAND HEALTH

In January 1997, Colorado BLM approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. The environmental analysis must address whether impacts resulting from the Proposed Action or alternatives being analyzed would maintain, improve, or deteriorate land health conditions relative to these resources. These analyses are conducted in relation to baseline conditions described in land health assessments (LHAs) completed by the BLM. The Proposed Action would occur in an area that was included in the Elk Creek LHA (BLM 2007) and Divide Creek LHA (BLM 2009).

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

During its internal scoping process for this Environmental Assessment (EA), pursuant to the National Environmental Policy Act (NEPA), BLM resource specialists identified the following elements of the natural and human environment as present in the project vicinity and potentially affected by the project:

- Access and Transportation
- Cultural Resources
- Invasive Non-Native Plants
- Migratory Birds
- Native American Religious Concerns
- Socioeconomics
- Soils
- Visual Resources

Resources and uses not listed above and not analyzed in this EA are either not present or, in the determination of BLM resource specialists, would not be affected by the project.

Access and Transportation

Affected Environment

The Harvey Gap communications site has public access available to it by passing through a wire gate just north of the dam and east of Garfield County Road 237 (CR237) and traveling in a southerly direction along the two-track route winding up the north-facing slope of the Grand Hogback east of Harvey Gap Reservoir (shown as Grass Valley Reservoir on Figure 1). Only four-wheel-drive vehicles could negotiate the steep access road to the existing Harvey Gap communication site operated by Garfield County under BLM right-of-way authorization; some road segments exceed 20% grade. The proposed repeater tower would be installed just west of the turn-around at the end of the site access road and approximately 150 feet east of the Garfield County communication site.

The I3B tower site is located along the private Pumba Compressor access road approximately 1.5 miles west of CR319 with the tower to be installed within the existing I3B pad reclamation area. Oil and gas field development vehicles have access to the I3B pad; public access is not available to the I3B pad.

Environmental Consequences

Proposed Action

No new road construction or maintenance work would be necessary to accommodate the installation of towers at either site. Road maintenance provisions would be included in the BLM right-of-way grant. Aside from the initial tower installations (which would involve a rubber-tired backhoe, pickup trucks, or similar-sized vehicles), the traffic expected to serve the sites would be limited to periodic visits focused on site maintenance work.

No Action Alternative

Under this alternative, none of the planned development activities outlined in the Proposed Action would occur. The No Action Alternative would not result in any additional service vehicles using the existing I3B pad or Harvey Gap communication site access roads.

Cultural Resources

Affected Environment

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take in to account the effects their actions would have on cultural resources. As a general policy, an agency must consider effects to cultural resources for any undertaking that involves Federal monies, Federal permitting/authorization, or Federal lands.

A Class III cultural resource inventory (CRVFO# 1112-18) of 10 acres was conducted specifically for the Harvey Gap Communication site and covered the entire proposed area of disturbance and most of the ridge top in the vicinity. Four previously done Class III cultural resource inventories (CRVFO# 14500-3, 5402-17, 14503-3 and 5404-16) covered the proposed location of the secondary repeater tower next to the existing I3B well pad. The cultural inventories and pre-field file searches of the Colorado State Historic Preservation Office (SHPO) database and BLM Colorado River Valley Field Office cultural records identified no cultural resources (eligible or potentially eligible sites or isolated finds) within the project areas of the two repeater towers. Eligible or potentially eligible sites are referred to in Section 106 of the National Historic Preservation Act as “historic properties.”

Environmental Consequences

Proposed Action

No historic properties are located in the vicinity of the project area or would be affected by the construction of the repeater communications towers and their foundations due to locations and project design. Therefore, the BLM made a determination of “**No Historic Properties Affected.**” This determination was made in accordance with the 2001 revised regulations [36CFR 800.4(d)(1)] for Section 106 of the NHPA (16U.S.C 470f), the BLM/SHPO Programmatic Agreement (2012) and Colorado Protocol (2012)]. As the BLM has determined that the Proposed Action would have no direct impacts to known “historic properties,” no formal consultation was initiated with the SHPO.

A standard Education/Discovery COA for cultural resource protection would be attached to the Federal Right-of-Way Grant. The importance of this COA should be stressed to the operator and its contractors, including informing them of their responsibilities to protect and report any cultural resources encountered during construction operations. Indirect long-term cumulative impacts from increased access and the presence of project personnel could result in a range of impacts to undiscovered cultural resources in the vicinity of the project locations. These impacts could range from accidental damage or vandalism to illegal collection and excavation.

No Action Alternative

Review of land status patterns in the vicinity of the project area indicates Summit could not feasibly install the repeater towers without crossing or using Federal land. Consequently, the No Action Alternative, consisting of denial of a Federal Right-of-Way Grant, would result in no new surface disturbance. This would lessen the potential to expose buried cultural resource artifacts and lessen the potential for indirect effects from illicit collection or vandalism as well as reduce the cumulative impacts on cultural resources.

Invasive Non-Native Plants

Affected Environment

A light-to-moderate scattering of cheatgrass (*Anisantha tectorum*) was observed at the proposed Harvey Gap communication repeater tower site. No other noxious weeds were observed at the site. Invasive non-native species within and adjacent to the project area that are not listed as noxious weeds in Colorado but which nonetheless can be problematic in terms of overall habitat quality and revegetation success included tumble mustard (*Sisymbrium altissimum*), flixweed (*Descurainia sophia*), yellow sweetclover (*Melilotus officinalis*), and salsify (*Tragopogon dubius*). BLM staff observed that these species were present immediately adjacent to the access road and did not appear to be encroaching into the established native plant community beyond the road edge. The site for the I3B tower is located within the previously disturbed and reclaimed area adjacent to the well pad. Weed monitoring and control are currently required for this site in the COAs for the I3B well pad.

Environmental Consequences

Proposed Action

Surface-disturbing activities provide a niche for the invasion and establishment of invasive, non-native species particularly when these species are already present in the surrounding area. At the Harvey Gap site, installation of the proposed concrete pads would eliminate a portion of the habitat currently infested

by cheatgrass, but would result in a minor amount of new disturbance and potential spread of seed infested soil. At the I3B site, disturbance would create potential habitat for invasive plants to colonize. Consequently, the standard weed control COA would be attached to APDs to require periodic monitoring and weed control practices to ensure that weedy plants are controlled (see Appendix A).

No Action Alternative

Under the No Action Alternative, the communication repeater towers and associated solar panel would not be installed, and no new disturbance would occur. Therefore, the risk of infestation or spread of noxious weeds would remain the same as under current conditions.

Migratory Birds

Affected Environment

The Migratory Bird Treaty Act (MBTA) provides Federal protection for migrant and resident native passerines (flycatchers and songbirds) as well as birds of prey, migratory waterbirds (waterfowl, wading birds, and shorebirds), and other species such as doves, hummingbirds, swifts, and woodpeckers. For most species, nesting habitat is of special importance because it is critical for supporting reproduction in terms of both nesting sites and food. In addition, because birds are generally territorial during the nesting season, their ability to access and utilize sufficient food is limited by the quality of the territory occupied. During non-breeding seasons, birds are generally non-territorial and able to feed across a larger area and wider range of habitats.

Numerous migratory bird species occupy, or have the potential to occupy, habitat types subject to disturbance associated with the Proposed Action. Emphasizing the need to conserve declining species, the U.S. Fish and Wildlife Service (USFWS) has published a list of Birds of Conservation Concern (BCC) that warrant special conservation attention to stabilize or increase populations or to secure threatened habitats. This section focuses on BCC species, non-BCC species that are Neotropical (long-distance) migrants, and raptors—three groups highly vulnerable to habitat loss or modification on their breeding grounds.

Species on the BCC list potentially present in pinyon-juniper woodlands in the project area include the pinyon jay (*Gymnorhinus cyanocephalus*) and juniper titmouse (*Baeolophus griseus*). Other species associated with this habitat type include Neotropical migrants such as the broad-tailed hummingbird (*Selasphorus platycercus*), black-chinned hummingbird (*Archilochus alexandri*), western kingbird (*Tyrannus verticalis*), Say's phoebe (*Sayornis saya*), gray flycatcher (*Empidonax oberholseri*), mountain bluebird (*Sialia sialis*), plumbeous vireo (*Vireo plumbeus*), black-throated gray warbler (*Dendroica nigrescens*), chipping sparrow (*Spizella passerina*), lark sparrow (*Chondestes grammacus*), and lesser goldfinch (*Spinus psaltria*). Sagebrush habitats may support one BCC species, Brewer's sparrow (*Spizella breweri*), as well as other migrants such as the western meadowlark (*Sturnella neglecta*) and vesper sparrow (*Pooecetes gramineus*). Based on the extent and quality of the sagebrush, the habitat is marginal for Brewer's sparrow and likely unsuitable for another sagebrush obligate, the sage sparrow (*Amphispiza bellii*).

Environmental Consequences

Proposed Action

Due to the use of existing infrastructure, the Proposed Action would not result in a loss habitat for migratory birds. It is possible that during construction activities, individual birds could be displaced to

adjacent habitats due to noise and human presence. Effects of displacement could include increased risk of predation or failure to reproduce if adjacent habitat is at carrying capacity. However, given the short duration of activities, impacts are expected to be negligible.

The operator remains subject to the MBTA, administered by the USFWS, which precludes the “take” of any raptor or most other native species. Under the Act, the term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The USFWS interprets “harm” and “kill” to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

No Action Alternative

The No Action Alternative constitutes denial of the Federal Right-of-Way Grant needed for Summit to complete the desired repeater installations. Consequently, none of the planned development activities or potential impacts on migratory birds outlined for the Proposed Action would occur.

Native American Religious Concerns

Affected Environment

The Proposed Action would be implemented within an area identified by the Ute Tribes as part of their ancestral homeland. Several Class III cultural resource inventories (see section on Cultural Resources) were conducted in the Proposed Action’s vicinity to determine if any areas were known to be culturally sensitive to Native Americans. No sensitive areas were identified or are currently known in the proposed project area.

Environmental Consequences

Proposed Action

At present, no Native American concerns are known within the project area and none were identified during the inventories. The Ute Tribe of the Uintah and Ouray Bands, the primary Native American tribe in this area of the CRVFO, have indicated that they do not wish to be consulted for small projects or projects where no Native American areas of concern have been identified either through survey or past consultations. Consultations were conducted in 2002 and 2004 for two of the previous cultural resource inventories that included the I3B well pad site, and no areas of Native American concern were identified. Therefore, formal consultation with Native American Tribes was not undertaken for the current project. If new data are disclosed, new terms and conditions may have to be negotiated to accommodate their concerns.

Although the Proposed Action would have no direct impacts, increased access and personnel in the vicinity of the proposed project could indirectly impact unknown Native American resources ranging from illegal collection to vandalism.

The National Historic Preservation Act (NHPA) requires that if newly discovered cultural resources are identified during project implementation, work in that area must stop and the BLM notified immediately (36 CFR 800.13). The Native American Graves Protection and Repatriation Act (NAGPRA), requires that if inadvertent discovery of Native American Remains or Objects occurs, activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice made to the BLM, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a

30-day delay (NAGPRA Section 3(d)). Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act. Grand River Gathering, LLC would notify its staff and contractors of the requirement under the NHPA, that work must cease if cultural resources are found during project operations. A standard Education/Discovery COA for the protection of Native American values would be attached to the Federal Right-of-Way Grant (Appendix A). The importance of these COAs should be stressed to the operator and its contractors, including informing them of their responsibilities to protect and report any cultural resources encountered. The proponent and contractors should also be aware of requirements under the NAGPRA.

No Action Alternative

Review of land status patterns in the vicinity of the project area indicates Summit could not feasibly install the repeater towers without crossing or using Federal land. Consequently, the No Action Alternative, consisting of denial of a Federal Right-of-Way Grant, would result in no new surface disturbance. This would lessen the potential to expose buried objects of Native American religious significance and lessen the potential for indirect effects from illicit collection or vandalism as well as reduce the cumulative impacts on these resource values.

Soils

Affected Environment

According to the *Soil Survey of Rifle Area, Colorado* (USDA 1985), both proposed tower footings would be located in the Torriorthents-Rock outcrop complex. This soil complex is composed of sandstone, shale bedrock, and stony soils that are shallow to moderately deep. The soils and outcrops are moderately steep to very steep with slopes ranging from 15 to 70 percent. The erosion hazard is moderate to severe, and structures generally require engineering design and construction techniques. Primary uses for these soils are wildlife habitat and recreation.

Environmental Consequences

The Proposed Action would result in approximately 980 square feet (0.023 acre) of surface disturbance, including 200 square feet (0.005) acre at the existing Harvey Gap Communication Site and 780 square feet (0.018 acre) adjacent to the existing I3B pad. The disturbance would be limited to the footprint of the two small pads and travel along existing roads and two-tracks. The site for the I3B tower is located within the previously disturbed and reclaimed area adjacent to the well pad. The repeaters would be placed on relatively flat areas on top of the hill so impact to the steep slopes would be avoided and the concrete would be hand-mixed to minimize the impact of transporting materials. The area generally contains adequate vegetation buffers that would minimize the potential for sediment transport. However, construction activities would cause slight increases in local soil loss and loss of soil productivity. Particular care would be taken during construction and reclamation to ensure that proper BMPs, including the COAs listed in Appendix A, are utilized to prevent erosion and slope instability due to construction activities.

No Action Alternative

Under the No Action Alternative, the communication repeater towers and associated solar panels would not be installed, and no new disturbance to soils would occur. Therefore soil conditions would remain the same as under current conditions.

Visual Resources

Affected Environment

The proposed repeater installations (Harvey Gap Communication Site and the I3B Well Pad Communication Site) would be located on public lands administered by the BLM. The Harvey Gap Communication Site is located approximately 4 air miles north of Silt, Colorado. The I3B Well Pad is located approximately 5 air miles southeast of Rifle, Colorado. These lands are classified as Visual Resource Management (VRM) Class II and III as identified by the 1984 Glenwood Springs Resource Management Plan (Figure 3).

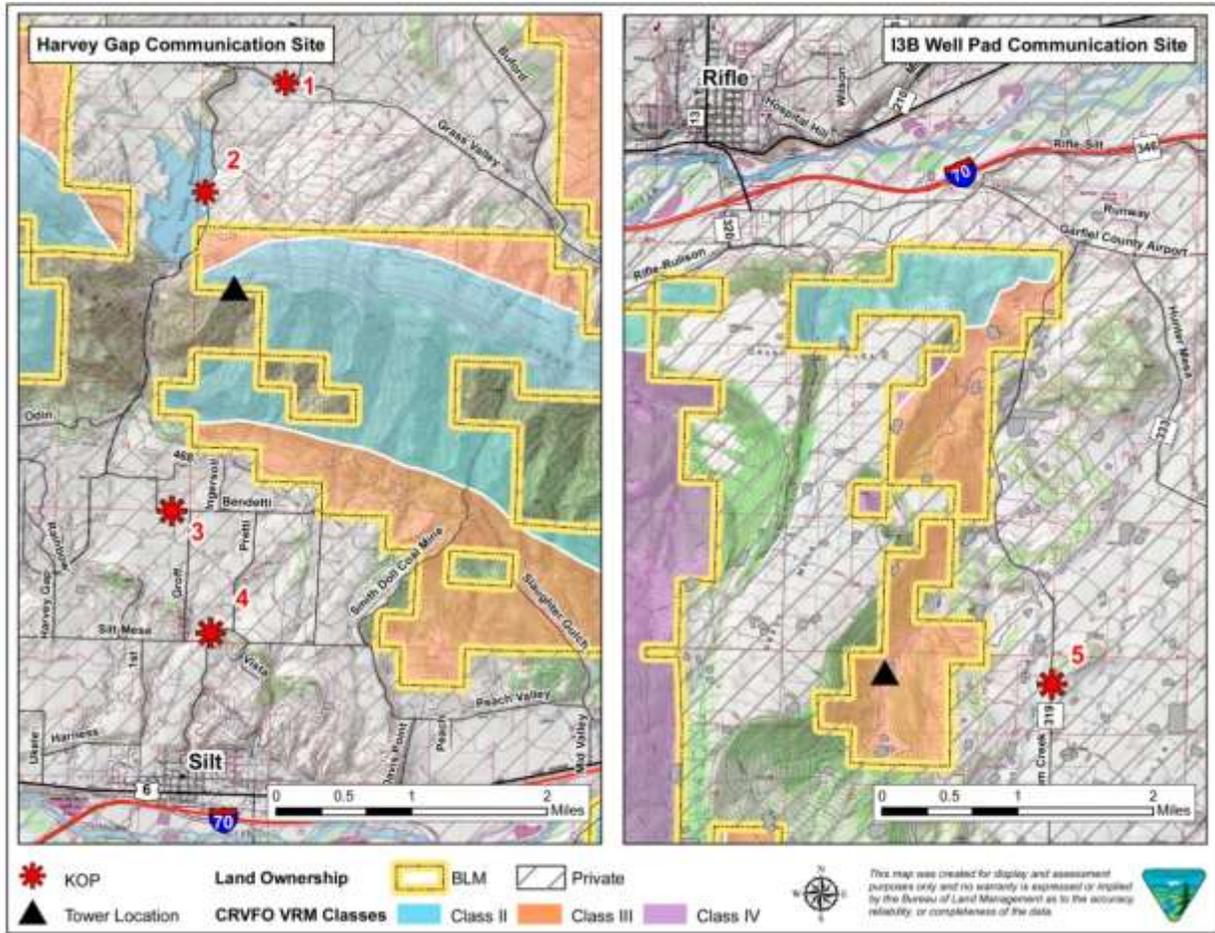


Figure 3. Proposed Action in Relation to Visual Resource Management (VRM) Designations

The objectives for VRM Classes II and III, as defined in the BLM's Manual H-8410-1 – Visual Resource Inventory (BLM 1986), are described below.

- The objective of VRM Class II is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities 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 the predominant natural features of the characteristic landscape.

- The objective of VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

The proposed Harvey Gap Communication tower would occur entirely on VRM Class II land. The proposed I3B Well Pad Communication tower would occur entirely on VRM class III land.

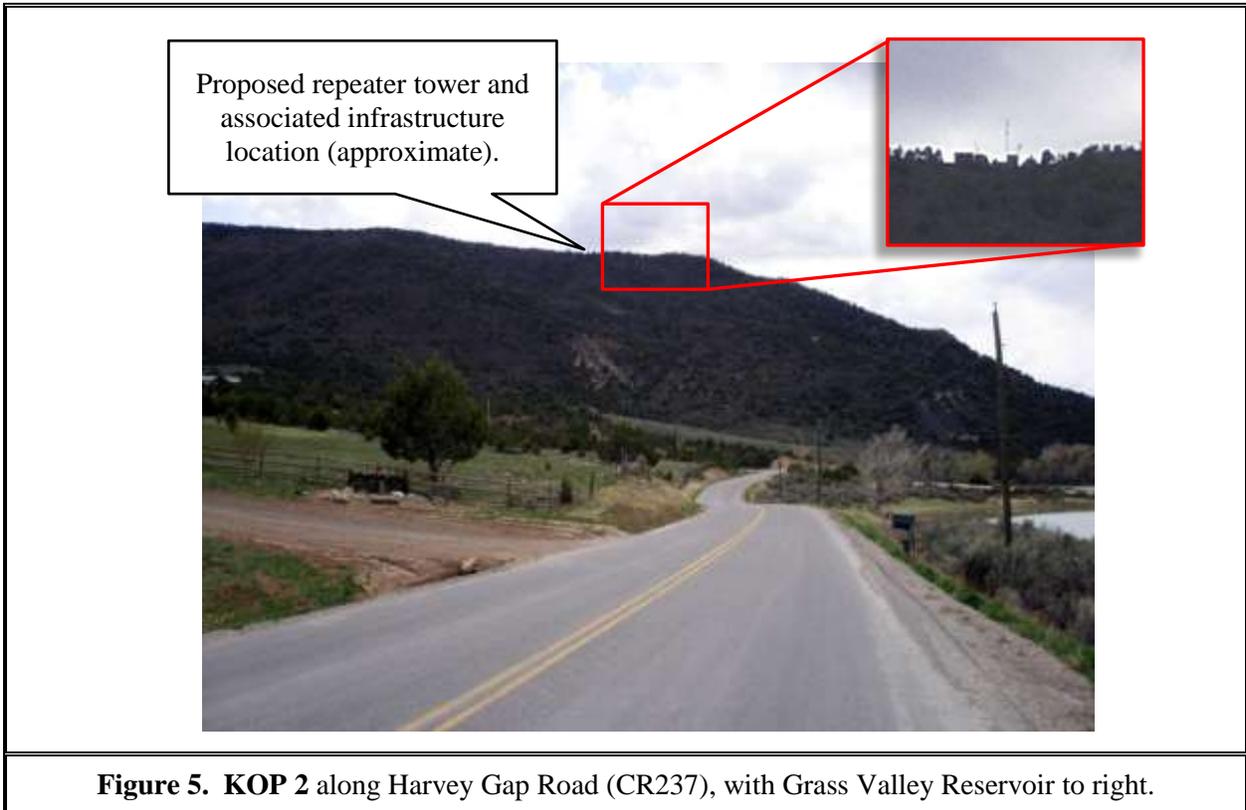
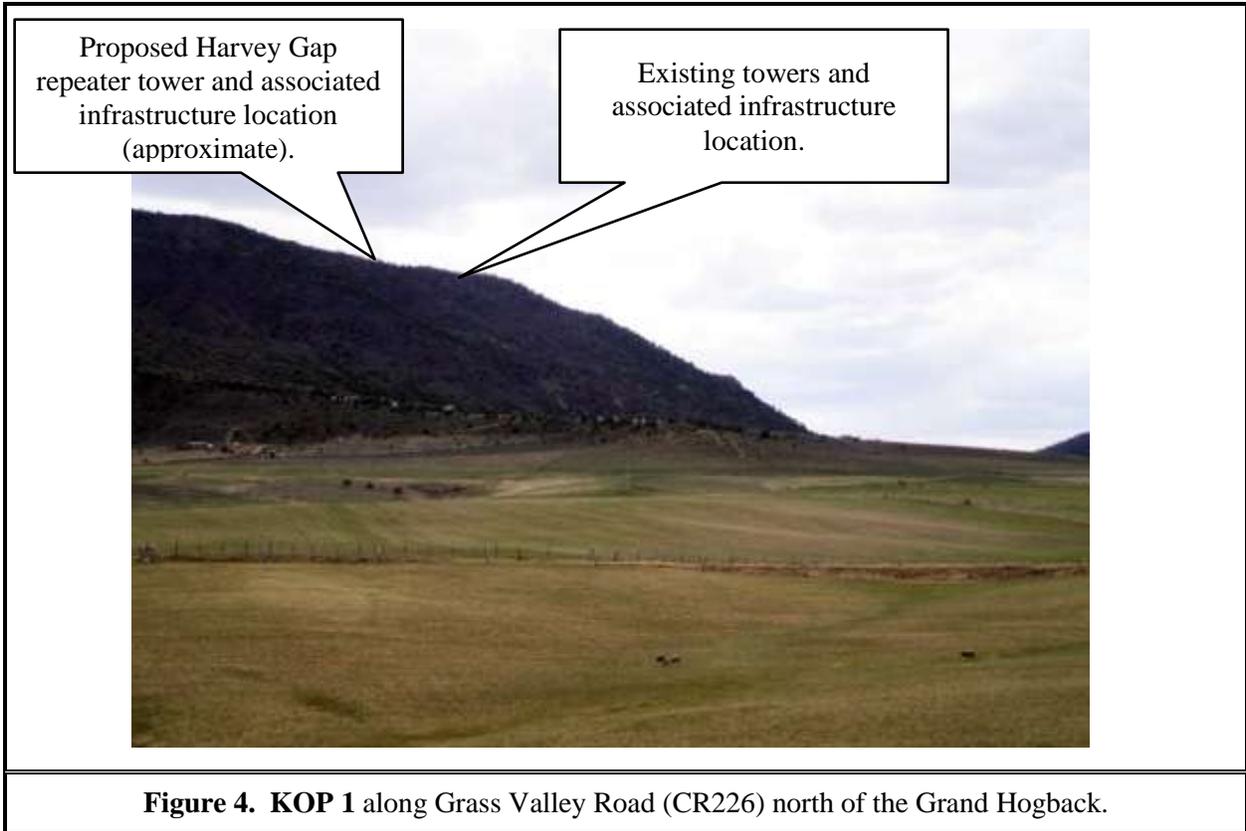
The Harvey Gap site is located along the ridgeline of the Grand Hogback a short distance southeast of Grass Valley Reservoir. The Grand Hogback rises steeply from Silt Mesa and creates a dramatic backdrop to the community of Silt and rural residences directly north in Grass Valley. The surrounding area is characteristic of rural agricultural land/ranching land, scattered rural residences, and some oil and gas development directly south of the Grand Hogback. Vegetation within the project location consists predominantly of stippled vertical dark-green pinyon-juniper woodland with an understory of forbs and grasses, tan and red bare soils, and rugged rock outcrops on the south side of the Grand Hogback. The north side has similar vegetation with a denser texture with less exposed soils and rock outcroppings.

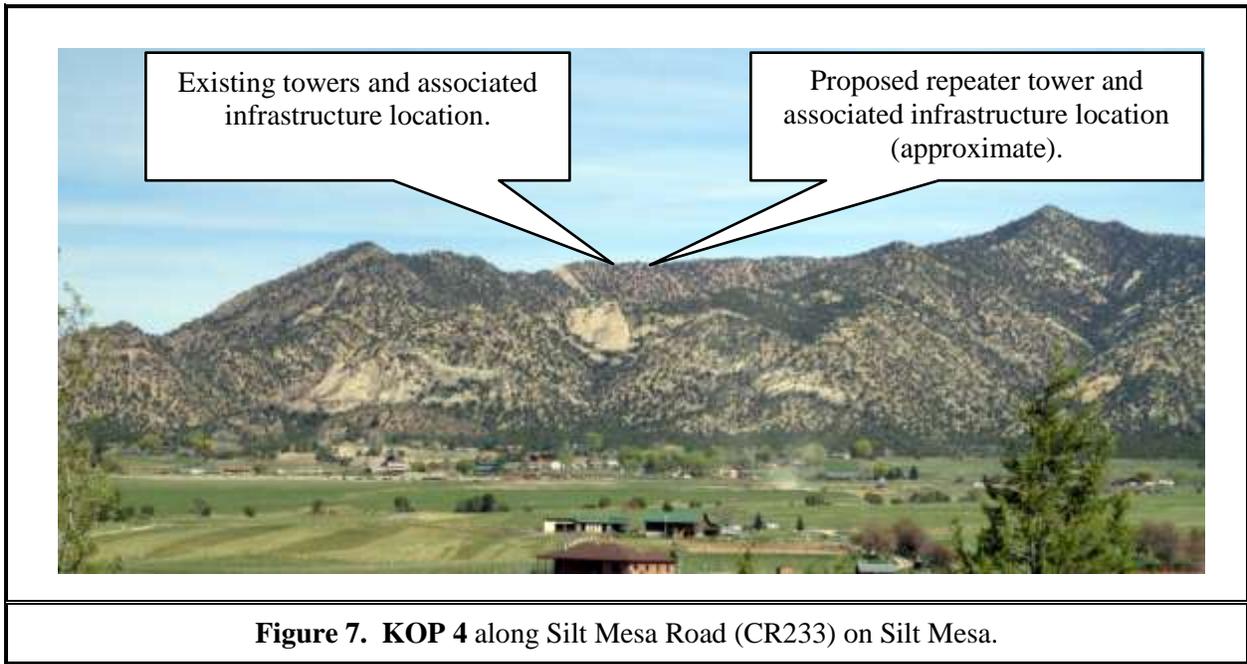
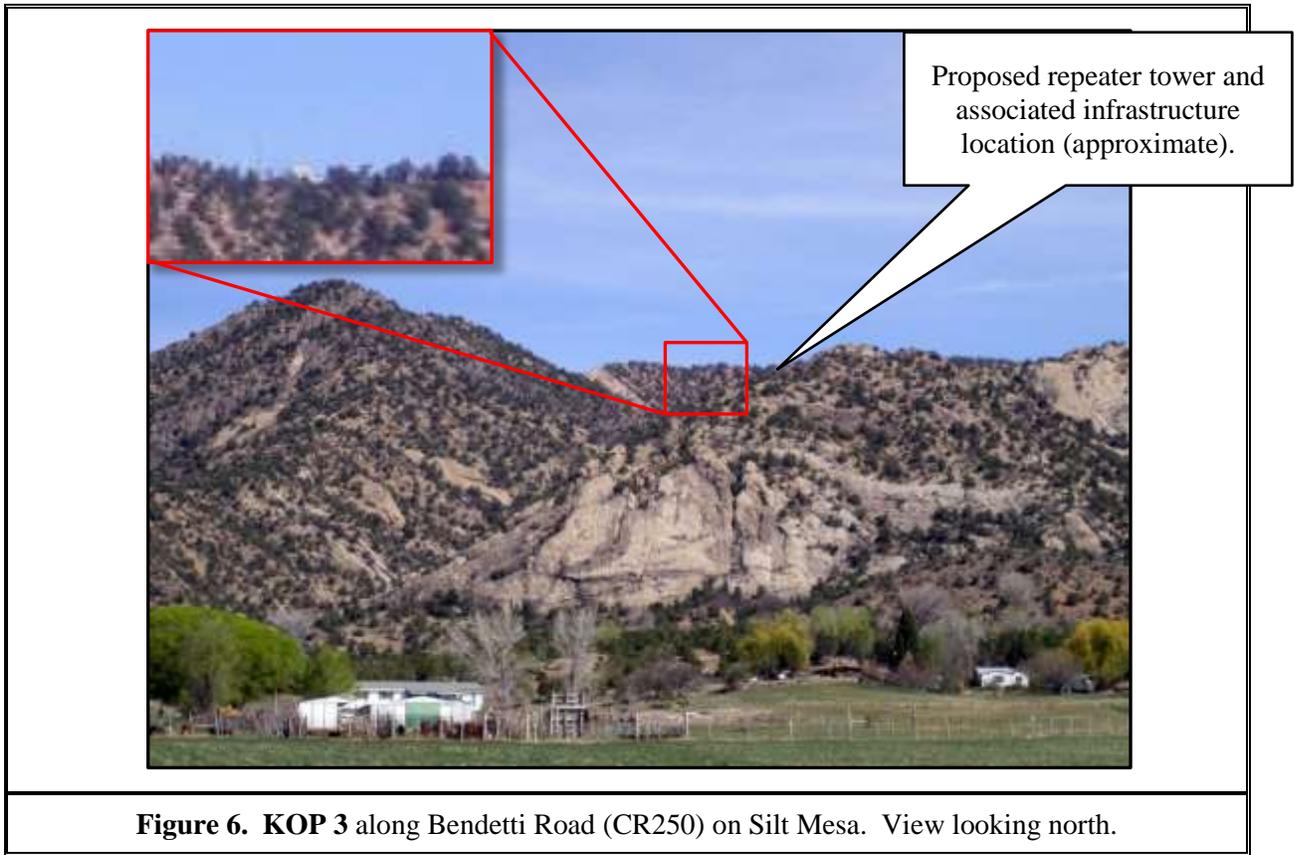
The I3B well pad communication site is located within a small valley bottom enclosed by Grass Mesa immediately to the west and a minor ridgeline to the west that begins to flatten out as it meets CR319. The surrounding area is characteristic of oil and gas development and some scattered rural residences. Vegetation is predominantly sagebrush in the valley bottom, but as the topography begins to gain elevation along the valley bottom, vegetation is predominantly pinyon- juniper woodland with an understory of forbs and grasses and tan bare soils.

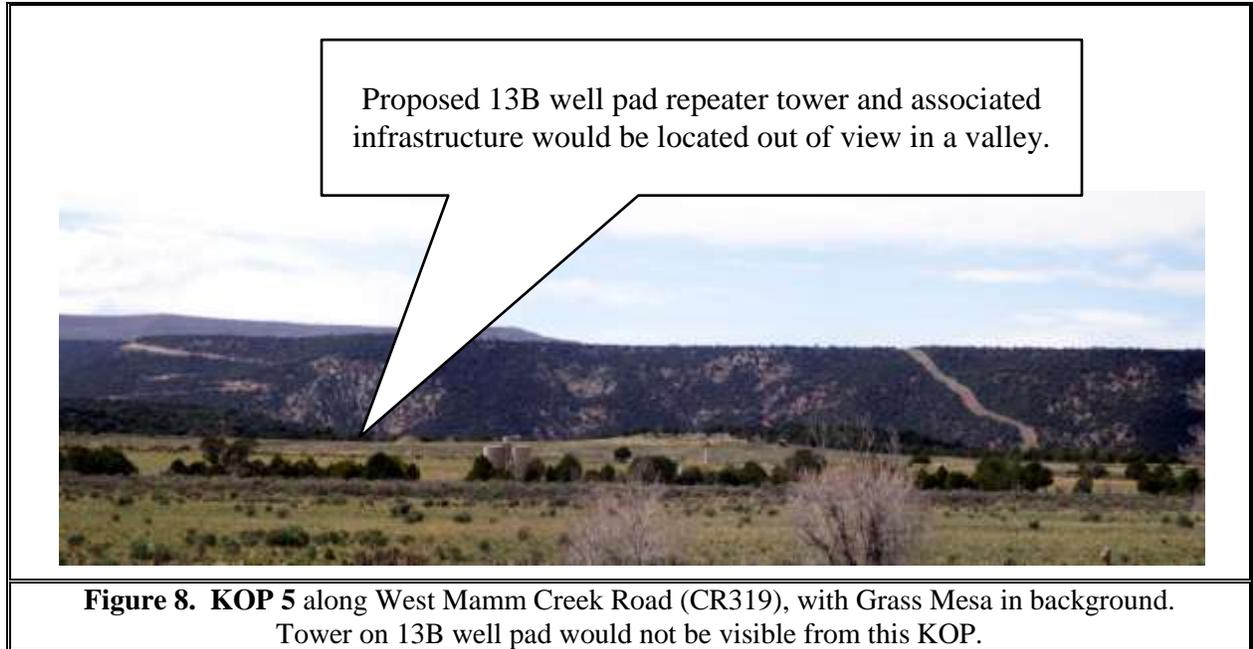
The visual resource analysis area for the Harvey Gap communication site includes Silt Mesa and Grass Valley. These viewsheds are considered important, because they are seen by a large number of people who live, work, recreate, and travel through the area. The I3WB well pad communication site includes CR319. This is the primary travel corridor near the I3WB well pad and is used by people who live and work in the area. Both proposed tower locations would occur in the viewer's foreground, less than 5 miles from primary travel corridors and of moderate to very high visual exposure, where details of vegetation and landform are readily discernible and changes in visual contrast can be easily noticed. The area surrounding the project location is characteristic of oil and gas development and some scattered rural residences. Vegetation is predominantly sagebrush in the valley bottom, but as the topography begins to gain elevation along the valley bottom, vegetation is predominantly pinyon- juniper woodland with an understory of forbs and grasses and tan bare soils.

The visual resource analysis area for the Harvey Gap communication site includes Silt Mesa and Grass Valley. These viewsheds are considered important, because they are seen by a large number of people who live, work, recreate, and travel through the area. The I3WB well pad communication site includes CR319. This is the primary travel corridor near the I3WB well pad and is used by people who live and work in the area. Both proposed tower locations would occur in the viewer's foreground, less than 5 miles from primary travel corridors and of moderate to very high visual exposure, where details of vegetation and landform are readily discernible and changes in visual contrast can be easily noticed.

The visual impact analysis for both locations is based on the views from five Key Observation Points (KOPs)(Figures 4 through 8) representing five linear viewer locations representing the viewing angle and direction with the highest frequency of viewers: Grass Valley Road (CR226), Harvey Gap Road (CR237), Bendetti Road (CR250), Silt Mesa Road (CR233), and West Mamm Creek Road (CR319). All five KOPs represent typical views that a viewer would have while traveling near the project locations. The viewer would be at a lower elevation than the Proposed Action at KOPs 1-4 and higher than the Proposed Action at KOP 5.







Environmental Consequences

Proposed Action

The Proposed Action would result in minimal visual impacts (as seen from Figures 4 through 8) for both tower locations because of the scale of the projects and the nature of adjacent topography and vegetation. The repeater towers are 20 feet in total height. Each tower would have a concrete foundation, an equipment cabinet, antennas, and solar array. The majority of the tower infrastructure would be of a low profile and sitting on the ground surface. The towers and antennas would add vertical elements to the landscape but would blend in with the existing vertical elements provided by the pinyon pine and juniper trees. Total surface disturbance for the two repeater sites would be 200 square feet (0.005 acre). Figure 9 (following page) shows the existing towers and infrastructure on the Harvey Gap ridgeline. The existing towers and infrastructure, roughly similar to the Proposed Action facilities, are barely visible from the KOPs.

The area surrounding the project location is characteristic of oil and gas development and some scattered rural residences. Vegetation is predominantly sagebrush in the valley bottom, but as the topography begins to gain elevation along the valley bottom, vegetation is predominantly pinyon- juniper woodland with an understory of forbs and grasses and tan bare soils.

Harvey Gap Repeater Site

The Grand Hogback ridgeline runs northwest to southeast, in general. However minor ridgelines along the southern edge run in a north-south orientation, almost forming a horseshoe shape coming off the main Grand Hogback spine. The Harvey Gap tower location is at the top of one of these horseshoe shapes, with a minor ridgeline directly to the west and east that run north to south (KOP 4). These ridgelines provide visual screening of the project location from viewer locations further to the west and east. The tower location also sits at a low point between two higher points along the ridgeline. In addition, rugged rock outcrops at the toe of Grand Hogback on the south side would provide visual screening for viewers immediately below the Grand Hogback (KOP 3).



Figure 9. Existing facilities on Harvey Gap
ridgeline. New facilities would to the east of these
(behind the photographer and similar or smaller).

The views from Grass Valley north of the Grand Hogback are screened by the dense vegetation along the north-facing slopes of the ridge. Reflections off the solar arrays may be more visible at certain times of the day and year because of the angle of the sun. However, during the visual resource analysis, no reflection from the existing solar arrays was observed. The Proposed Action would satisfy the VRM Class II objectives by not attracting attention of the casual observer from the KOPs and by retaining the existing character of the landscape by using a small footprint. However, to ensure that the Proposed Action would blend in with the immediate landscape, mitigation measures are included as COAs in Appendix A.

I3B Well Pad Repeater Site

The I3B well pad (Figure 10) sits within a small enclosed valley that is only visible from the valley floor itself. The tower would sit next to an existing pad with associated facilities. The Proposed Action would satisfy VRM Class III objectives by not being readily evident or dominate in the landscape from the KOP. However, to ensure that the Proposed Action blends in with the immediate landscape, mitigation measures are included as COAs in Appendix A.



Figure 10. The I3B well pad, looking north toward the Grand Hogback and the proposed Harvey Gap repeater site.

No Action Alternative

From reviewing land status patterns in the vicinity of the project area, it does not appear that Summit could feasibly install the repeater towers without crossing or using Federal land. The No Action Alternative constitutes denial of the Federal Right-of-Way Grant needed for Summit to complete the desired repeater installations. Consequently, none of the planned development activities outlined in the Proposed Action would occur, and there would be no impacts to visual resources.

SUMMARY OF CUMULATIVE IMPACTS

Historically, habitat loss or modification in the CRVFO areas was characteristic of agricultural, ranching lands, rural residential, with localized industrial impacts associated with the railroad and I-70 corridors and the small communities. More recently, the growth of residential and commercial uses, utility corridors, oil and gas developments, and other rural industrial uses (e.g., gravel mining along the Colorado River) has accelerated the accumulation of impacts in the area. Cumulative impacts have included (1) direct habitat loss, habitat fragmentation, and decreased habitat effectiveness; (2) increased potential for runoff, erosion, and sedimentation; (3) expansion of noxious weeds and other invasive species; (4) increased fugitive dust from construction of oil and gas pads, roads, and pipelines and associated truck travel; (5) increased noise, especially along access and haul roads; (6) increased potential for spills and other releases of chemical pollutants; and (7) decreased scenic quality.

Although none of the cumulative impacts was described in the 1999 FSEIS (BLM 1999a) as significant, and while new technologies and regulatory requirements have reduced the impacts of some land uses, it is clear that past, present, and reasonably foreseeable future actions have had and would continue to have

adverse effects on various elements of the human environment. Anticipated impacts for existing and future actions range from negligible to locally major, and primarily negative, for specific resources.

The primary bases for this assessment are twofold: First, the rate of development, particularly oil and gas development, has generally been increasing in the area, resulting in an accelerated accumulation of individually nominal effects. Second, residential and commercial expansion, as well as most of the oil and gas development, has occurred on private lands where mitigation measures designed to protect and conserve resources may not be in effect to the same extent as on BLM lands. Recent COGCC regulations have closed considerably the gap between the potential environmental impacts associated with development of private versus Federal fluid mineral resources.

The Proposed Action would contribute to the collective adverse impact for some resources. Although the contribution would be minor, the Proposed Action would add incrementally to the collective impact to air quality, vegetation, migratory birds, terrestrial wildlife, and other resources.

PERSONS AND AGENCIES CONSULTED

Summit – Renata Busch, Fred Byers

INTERDISCIPLINARY REVIEW

BLM staff on the CRVFO team who participated in the preparation of this EA are listed in Table 1.

Table 1. BLM Interdisciplinary Team Authors and Reviewers		
<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
John Brogan	Archaeologist	Cultural Resources, Native American Religious Concerns
Jim Byers	Natural Resource Specialist	EA Project Lead, Access & Transportation
Allen Crockett, Ph.D.	Supervisory Natural Resource Specialist	Technical Review, NEPA Review
Shauna Kocman, Ph.D.	Hydrologist	Soils
Julie McGrew	Natural Resource Specialist	Visual Resources
Judy Perkins, Ph.D.	Ecologist	Invasive Non-native Species
Sylvia Ringer	Wildlife Biologist	Migratory Birds
D. J. Beaupeurt	Realty Specialist	Rights-of-Way

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APPENDIX A
Surface Use Conditions of Approval

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**SURFACE USE CONDITIONS OF APPROVAL
FOR BLM RIGHTS-OF-WAY COC75447 AND COC75448
DOI-BLM-CO-N040-2012-0060-EA**

Standard CRVFO Surface-use COAs Applicable to the Project

1. Administrative Notification. The operator/holder shall notify the BLM representative at least 48 hours prior to initiation of construction. If requested by the BLM representative, the operator shall schedule a pre-construction meeting, including key operator and contractor personnel, to ensure that any unresolved issues are fully addressed prior to initiation of surface-disturbing activities or placement of production facilities. No construction activities shall commence without staking of site construction limits.
2. Road Maintenance. The operator/holder shall provide timely year-round road maintenance and cleanup on the access roads. A regular schedule for maintenance shall include, but not be limited to, blading and ditch or culvert cleaning. When rutting within the traveled way becomes greater than 6 inches, blading shall be conducted as approved by the BLM.
3. Reclamation. The goals, objectives, timelines, measures, and monitoring methods for final reclamation of the proposed surface disturbances related to the installation of tower repeaters are described in Appendix I (Surface Reclamation) of the 1998 Draft Supplemental EIS (DSEIS). On all disturbed soil surfaces related to the two repeater tower installations, the operator/holder shall hand-broadcast the BLM-approved **Pinyon-Juniper Woodland and/or Mountain/Wyoming Big Sagebrush Shrubland** seed mix as identified in BLM, CRVFO Revegetation Seed Mix Menus Letter, dated April 6, 2012. Specific questions regarding reclamation of the sites can be directed to the CRVFO Energy Team botanist at 970-876-9054 or by email to jlperkins@blm.gov.
4. Weed Control. The operator/holder shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the Glenwood Springs Field Office *Noxious and Invasive Weed Management Plan for Oil and Gas Operators*, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports shall be submitted to BLM by **December 1**.
5. Bald and Golden Eagles. It shall be the responsibility of the operator/holder to comply with the Bald and Golden Eagle Protection Act (Eagle Act) with respect to “take” of either eagle species. Under the Eagle Act, “take” includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest and disturb. “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Avoidance of eagle nest sites, particularly during the nesting season, is the primary and preferred method to avoid a take. Any oil or gas construction, drilling, or completion activities planned within 0.5 mile of a bald or golden eagle nest, or other associated activities greater than 0.5 miles from a nest that may disturb eagles, should be coordinated with the BLM project lead and BLM wildlife biologist and the USFWS representative to the BLM Field Office (970-876-9051).
6. Fossil Resources. All persons associated with operations under this authorization shall be informed that any objects or sites of paleontological or scientific value, such as vertebrate or scientifically important invertebrate fossils, shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with operations under this authorization any of the above resources are encountered the

operator/holder shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM of the findings. The discovery must be protected until notified to proceed by the BLM.

Where feasible, the operator/holder shall suspend ground-disturbing activities at the discovery site and immediately notify the BLM of any finds. The BLM will, as soon as feasible, have a BLM-permitted paleontologist check out the find and record and collect it if warranted. If ground-disturbing activities cannot be immediately suspended, the operator/holder shall work around or set the discovery aside in a safe place to be accessed by the BLM-permitted paleontologist.

7. Cultural Education/Discovery. All persons in the area who are associated with this project shall be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

Pursuant to 43 CFR 10.4(g), the BLM shall be notified by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), activities shall stop in the vicinity of the discovery, and the discovery shall be protected for 30 days or until notified by the BLM to proceed.

If in connection with operations under this contract, the operator/holder, its contractors, their subcontractors, or the employees of any of them discovers, encounters, or becomes aware of any objects or sites of cultural value or scientific interest such as historic ruins or prehistoric ruins, graves or grave markers, fossils, or artifacts, the operator/holder shall immediately suspend all operations in the vicinity of the cultural resource and shall notify the BLM of the findings (16 USC 470h-3, 36 CFR 800.112). Operations may resume at the discovery site upon receipt of written instructions and authorization by the BLM. Approval to proceed will be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the BLM from a Federal agency insofar as practicable. When not practicable, the operator/holder shall bear the cost of the services of a non-Federal professional.

Within five working days, the BLM will inform the operator/holder as to:

- whether the materials appear eligible for the National Register of Historic Places
- what mitigation measures the holder will likely have to undertake before the site can be used (assuming that *in-situ* preservation is not necessary)
- the timeframe for the BLM to complete an expedited review under 36 CFR 800.11, or any agreements in lieu thereof, to confirm through the SHPO State Historic Preservation Officer that the findings of the BLM are correct and that mitigation is appropriate

The operator/holder may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately cleared of resources and the exposed materials are recorded and stabilized. Otherwise, the operator/holder shall be responsible for mitigation costs. The BLM will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM that the required mitigation has been completed, the operator/holder will be allowed to resume construction.

Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or

indirectly, by the Proposed Action shall also be included in this evaluation or mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the operator/holder's cost, including the cost of consultation with Native American groups.

Any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361).

8. Visual Resources

To the extent practicable, repeater towers and antennas shall be constructed with dark colored non-reflective all-weather galvanized materials.

To the extent practicable, above-ground facilities (equipment cabinet and back side of solar array) shall be painted **Shadow Gray** to minimize contrast with existing surrounding vegetation and/or rock outcroppings.

To the extent practicable, existing vegetation shall be preserved when clearing and grading for the tower concrete foundation and installation, and the solar array foundation and frame installation.

CRVFO Right-of-Way Stipulations Attached to the ROW Grant

1. Drawings. The holder shall submit complete drawings to the BLM prior to any new construction, modification, or expansion of a facility. The information shall include:
 - a. A copy of the approved site plan base map showing all of the proposed new, modified, or expanded facilities, including structures, towers, and auxiliary equipment;
 - b. Completed drawings or plans prepared by a professional engineer or architect;
 - c. Identification of any proposed microwave beam paths, a plot of their azimuth, and their proposed elevation on the tower;
 - d. Documentation showing that the proposed facilities will not obstruct or interfere with any existing uses, including fixed point-to-point antennas, omnidirectional broadcast antennas, or microwave beam paths;
 - e. Demonstrating that the new facility will make the most efficient use of the limited amount of space at the site and will provide for future uses without additional construction;
 - f. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans; and
 - g. Providing an erosion control plan prior to construction. At a minimum, the erosion control plan shall include sediment control, stipulations that cut-and-fill slopes will be graded and contoured to prevent erosion and excessive runoff, and recommendations for temporary erosion control measures, such as netting, silt fences, swales, sediment collection areas, and so forth.
2. Side-casting. No side-casting of materials is allowed. Excess soil may be used as fill material for roads, buildings, and towers but shall not be side-cast off the disturbance area.
3. Antennas. Antennas and other than ground-mounted satellite dishes shall be the minimum size necessary to meet RF needs.

- a. All antennas shall meet all OSHA safety standards. If an antenna is operating in excess of FCC public or occupations standards, steps such as fencing, posting of signs, relocation, and lowering of power levels shall be taken within 24 hours to bring it into compliance. Ground measurements of RFR levels will be taken before mitigation measures are implemented.
 - b. All towers shall be left unpainted if they are made of dull galvanized steel or Cor-Ten steel. Paint shall be required if the towers have a shiny or reflective surface. Non-reflective paint in the BLM-approved color **Shadow Gray** colors shall be used on all facilities, unless consultation with the BLM allows for other color use in order to meet requirements of the FAA and other authorized agencies. White dish antennas and covers shall not be approved.
 - c. Low-powered transmit and receive antennas may be located low on the tower.
 - d. Microwave dishes shall be located as low on the tower as technically feasible to reduce their visual impact.
4. Electronic Interference. Interference with law enforcement and/or emergency communications shall be corrected immediately. Operation of equipment covered by this site plan shall not interfere with Federal government radio or electronic operations. The user causing this interference shall, at their own expense, take all actions necessary to prevent or eliminate the interference. If the interference is not eliminated within ten days after receipt of notice from the BLM, this grant shall be terminated.
5. Compliance with Laws. Holder shall ensure the facilities and all equipment comply with Federal, State, and local laws, regulations, and ordinances. Proposed modifications shall be pre-approved by the BLM. All communications equipment in the facility shall be properly installed, operated, and maintained in accordance with ANSI, OSHA, FCC, and BLM regulations, guidelines and standards concerning radiation limitations, including monitoring radiation levels at their facility and immediately correcting any radiation levels that are, or could be a hazard to human health.
- The holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601 *et seq.*) with regard to any toxic substances that are used, generated by, or stored on the ROW or on facilities authorized under this ROW grant (see 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), Section 102b. A copy of any report required or requested by any Federal agency or state government as a result of a reportable release of spill of any toxic substances shall be furnished to the BLM concurrent with the filing of the reports to the involved Federal agency or state government.
6. Compliance with Federal Right-of-Way Regulations. This grant amendment is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations parts 2800 and 2880.
7. Hold Harmless Clause. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601 *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the ROW (unless the release or threatened release is wholly unrelated to the operator's activity in the ROW). This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.

8. As-Built Surveys. An “as-built” center line survey of the right-of-way crossing Federal land, provided by a Certified Land Surveyor licensed to work in the State of Colorado, shall be provided to the AO within 2 months of completion of the project.
9. Survey Monuments. All survey monuments, witness corners, and/or reference monuments must be protected against destruction, obliteration, removal, or damage. Any damaged or obliterated markers must be reestablished in accordance with accepted survey practices at the expense of the Holder.
10. Signage. Communication sites shall be appropriately signed with the holder’s name, contact information, site name, and site location.
11. Road Maintenance Agreement. The holder shall obtain a Road Maintenance Agreement with any existing rights-of-way holders prior to any disturbance or construction of the communication site. A copy of the signed Agreement shall be forwarded to the Colorado River Valley Field Office (CRVFO) Energy Team within 30 days of the execution of the grant.
12. Trash. The holder shall promptly remove and dispose of all waste, caused by its activities. The term "waste" as used herein means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, petroleum products, ashes and equipment. No burning of trash, trees, brush, or any other material shall be allowed.
13. Statement of Uses. The holder shall provide the BLM by **October 15** of each year, a certified statement listing the type or types of communications uses provided.
14. Limited Area. All facilities shall remain within the established limits of their authorized area or may be deemed to be in trespass.
15. Site Maintenance. The objectives of site maintenance are to present a clean, neat, and orderly appearance at the site and to have all the authorized improvements at the site be safe for workers and the public. All users are responsible for maintaining the overall appearance of the site.
 - a. Miscellaneous debris remaining after construction or installation shall be immediately removed and properly disposed at an authorized facility. In particular, all loose wire or metal objects shall be removed from the site. The holder shall remove graffiti within ten working days of finding it. If graffiti occurs on natural features such as rocks and trees, the graffiti shall be removed in a method approved by the BLM.
 - b. The holders shall not leave or dispose of trash, garbage, or cut brush on BLM-managed lands. No outside trash or litter containers will be allowed. All trash and litter shall be removed from the site as it is produced.
 - c. Peeling paint on buildings and towers shall be repainted within 30 days of discovery. Paint colors must be approved by BLM.

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FONSI

DOI-BLM-CO-N040-2012-0060-EA

The Environmental Assessment (EA) analyzing the environmental effects of the Proposed Action has been reviewed. The project design and approved mitigation measures result in a Finding of No Significant Impact (FONSI) on the human environment. Therefore, an Environmental Impact Statement (EIS) is not necessary to further analyze the environmental effects of the Proposed Action.

DECISION RECORD

DECISION: It is my decision to approve the Proposed Action as described and analyzed in this EA.

RATIONALE: The bases for this decision are as follows:

1. This decision will provide for the orderly, economical, and environmentally sound exploration and development of oil and gas resources, including pipeline transport of produced natural gas, on Federal oil and gas leases.
2. Environmental impacts will be avoided or minimized by the best management practices and mitigation measures included in the Proposed Action or otherwise applied and enforced by BLM as Conditions of Approval (COAs).
3. This decision does not authorize the initiation of surface-disturbing activities on BLM. Surface-disturbing activities on BLM lands will not commence until issuance by BLM of right-of-way grants pursuant to this EA.

MITIGATION MEASURES: Mitigation measures presented in Appendix A of the EA will be incorporated as COAs for surface operations and attached to BLM rights-of-way grants.

NAME OF PREPARER: Jim Byers, Natural Resource Specialist

SIGNATURE OF AUTHORIZED OFFICIAL:



Allen B. Crockett, Ph.D., J.D.
Supervisory Natural Resource Specialist

DATE: _____

April 30, 2012