Environmental Assessment
Proposed East-side Communication Facilities

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Bureau of Land Management and
Bureau of Reclamation

Boise, Idaho, and Heyburn, Idaho

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Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
APLIC	Avian Power Line Interactive Committee
AUM	animal unit month
BLM	U.S. Bureau of Land Management
BMP	best management practice
BPA	U.S. Bonneville Power Administration
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CIG	Climate Impacts Group
CIP	Critical Infrastructure Protection
EA	Environmental Assessment
EACSS	Electronic Access Control and Surveillance Systems
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FLPMA	Federal Land Policy and Management Act
FONSI	Finding of No Significant Impact
GHMA	General Habitat Management Area
ITA	Indian Trust Asset
LUPA	Land Use Plan Amendment
MSFO	Reclamation's Middle Snake Field Office
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NHPA	National Historic Preservation Act
NOAA Fisheries	National Oceanic and Atmospheric Administration's National Marine Fisheries Service

ORV	off-road vehicle
P.L.	public law
PHMA	Priority Habitat Management Areas
PNRO	Reclamation's Pacific Northwest Regional Office
RDF	required design feature
Reclamation	U.S. Bureau of Reclamation
RMJOC	River Management Joint Operating Committee
RMP	Resource Management Plan
SCADA	supervisory control and data acquisition
SFA	Sagebrush Focal Area
SHPO	State Historic Preservation Officer
SRAO	Reclamation's Snake River Area Office
SRMA	Special Recreation Management Area
SSP	special status plant
SSS	special status species
USC	U.S. Code
USFO	Reclamation's Upper Snake Field Office
USFWS	U.S. Fish and Wildlife Service
VRM	visual resource management
WECC	Western Electricity Coordinating Council

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Chapter 1 PURPOSE AND NEED

1.1 Introduction

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and state laws and regulations. This EA summarizes a Bureau of Reclamation (Reclamation) proposal to locate microwave communication facilities on Bennett Mountain and Notch Butte and to locate additional equipment at three Reclamation office locations.

The project would provide a benefit and special service to the general public by improving the level of security of Federal telecommunications facilities pursuant to the North American Electric Reliability Corporation (NERC) standards for critical infrastructure protection requirements, as well as improving the telecommunication reliability for monitoring and controlling both Reclamation and Bonneville Power Administration (BPA) facilities. Reclamation and BPA are working together to address: (1) Reclamation's conversion to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operations, and (2) both agencies' requirements for critical infrastructure protection. The agencies are also constructing an improved system of microwave communications facilities from eastern Idaho to the Boise area.

1.2 Proposed Action

Reclamation proposes to access, locate, operate, and maintain microwave communication facilities on public lands managed by the Bureau of Land Management (BLM) on Bennett Mountain and Notch Butte in south-central Idaho, as well as to locate additional communication equipment at Reclamation's Pacific Northwest Regional Office, Middle Snake Field Office, and Upper Snake Field Office (Reclamation Office facilities). c

1.3 Purpose and Need for Action

The BLM's purpose and need is to respond to Reclamation's applications for communication facilities to be located on public lands managed by the BLM (Appendix A). BLM processes applications for communication facilities pursuant to Title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.) and the Telecommunications Act of 1996 (47 U.S.C. 332). Section 501 of the Federal Land Policy and Management Act (FLPMA) states that the BLM is authorized to grant, issue, or renew rights-of-way over, upon, under, or through public lands for systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communication. Section 704(c) of the Telecommunications Act requires Federal agencies to facilitate the development and placement of telecommunications equipment on buildings and land they manage when

placement does not conflict with the agency's mission or current or planned use of the property.

Reclamation's purpose and need is to convert to a centrally operated SCADA system for control of dam operations; comply with North American Electric Reliability Corporation/ Western Electricity Coordinating Council (NERC/WECC), Critical Infrastructure Protection (CIP), and Electronic Access Control and Surveillance Systems (EACSS) standards; and to coordinate with the BPA to construct an improved microwave system from eastern Idaho to the Boise area.

Reclamation's proposed communication facilities and additional equipment would improve the microwave communication system and reliability for monitoring and controlling both Reclamation and BPA facilities. Reclamation and BPA would be sharing resources and bandwidth capacity at both the Bennett Mountain and Notch Butte facilities.

In order to complete the communication link between Reclamation's Black Canyon Control Center (located at the Black Canyon Diversion Dam) and Reclamation and BPA facilities located in eastern Idaho, Reclamation has applied to the BLM to develop new microwave communication facilities on Bennett Mountain and Notch Butte. Reclamation will also install new equipment at Reclamation office facilities.

1.4 Federal Decision to be Made

The BLM will decide whether or not to approve Reclamation's application to develop new microwave communication facilities on Bennett Mountain and Notch Butte. If the BLM approves the proposed communication facilities, the BLM would also decide what terms and conditions would apply.

Reclamation will decide whether to install new equipment at Reclamation office facilities.

1.5 Location and Background

1.5.1 Bennett Mountain

The BLM-designated Bennett Mountain Communication Administrative Site (BMCAS) is located approximately 28 miles northeast of Mountain Home, Idaho, on public land administered by the BLM. There are also communication facilities located on privately owned lands directly adjacent to the BMCAS. The Bennett Mountain region is a mix of approximately 50 percent federally owned land and 50 percent privately owned land. The proposed tower site is located southwest of Bennet Mountain, approximately 1.25 air miles at an elevation of 7,321 feet above mean sea level. The area is generally characterized as a mountainous sagebrush steppe environment. The terrain has moderately steep slopes; the north and west slopes are typically covered with more-dense vegetation comprising a chaparral, conifer, and deciduous tree complex, depending on aspect, slope, and location. The

native vegetation understory is generally a shrub/grass-type community on a majority of the area, with larger vegetation, such as conifer and deciduous trees, on north and west-facing slopes and within wetter drainage areas. There are some areas of basalt cliffs and associated outcroppings with dispersed rubble throughout. The Mount Bennett Hills is a major dividing feature between the grassland of Camas Prairie to the north and the sagebrush-covered Snake River Plains to the south.

Bennett Mountain has developed into a vitally important communication site for both public and private entities. The mountain peak commands a great interest for communication uses due to its geographic orientation, relatively high elevation, remoteness of location, commercial power availability, unrestricted broadcast capabilities, and favorable proximity to larger population/market centers.

The BMCAS location is currently occupied by two buildings, multiple concrete pads, an above-ground propane tank, a sub-surface water tank, and multiple small miscellaneous man-made features and structures (Photograph 1-1, Photograph 1-2, and Photograph 1-3).

Photograph 1-1. Photo (taken facing south) of the proposed microwave communication facility location; this photo encompasses nearly the entire construction area.

Photograph 1-2. Photo (taken facing southeast) of the proposed microwave communication location

Photograph 1-3. Photo (taken facing north) of the proposed microwave communication facility location; towers in the background will remain unchanged and are not part of this project.

1.5.2 Notch Butte

The BLM-designated Notch Butte Communication Administrative Site (NBCAS) is located approximately 4 miles south of Shoshone, Idaho, on public land administered by the BLM. The elevation at the BLM-designated NBCAS is approximately 4,340 feet above mean sea level. The topography is generally slightly rolling hills with scattered basalt rock outcrops, plateaus, and buttes. Some native steppe vegetation and native grasslands were likely once predominant in the area surrounding Notch Butte; however, wildfires, including the 2007 Red Bridge Fire, motorized off-road vehicle (ORV) use, grazing, and other activities have reduced the native vegetation communities within and surrounding the Assessment Area.

The Notch Butte location, like the Bennett Mountain location, has developed into a vitally important communication site for both public and private entities. The Butte, relative to the surrounding area, commands a high interest for communication uses due to its geographic orientation, remoteness of location, commercial power availability, and unrestricted broadcast capabilities.

The proposed tower-installation location is currently unoccupied; however, it is located immediately adjacent to the NBCAS, which is occupied by multiple buildings, gravel and concrete pads, and communication tower (Photograph 1-4 and Photograph 1-5).

Photograph 1-4. Photo (taken facing south) taken within the existing communication site

Photograph 1-5. Photo (taken facing west) taken within the existing communication site

1.5.3 Reclamation Office Facilities

Reclamation's Pacific Northwest Regional and Snake River Area Offices are located in Boise, Idaho, in an urban setting. The Upper Snake River Field Office is located in Heyburn, Idaho, in a rural setting.

1.6 Conformance with BLM Land Use Plan(s)

1.6.1 Bennett Mountain

The BLM BMCAS is located within the Four Rivers Field Office management area and is covered by the Jarbidge Resource Management Plan (BLM 1987). The RMP designates the subject area as being within Multiple Use Area-2 Upper Bennett Hills, with a Moderate Use classification on approximately 62,000 acres, including the proposed project area. Decisions in the plan that affect this multiple-use area do not address site-specific projects as the one being proposed; however, the plan does provide for the production and use of forage, timber, minerals and energy, recreation, or other consumptive resources while maintaining or enhancing natural systems. Sensitive and significant resource values will be protected, consistent with Federal and state law. Land-use authorizations under Title V of FLPMA will be considered in the area, except where specifically identified in the RMP for avoidance. Future communication site needs will be restricted to existing sites as much as possible. New sites will be considered if there is a demonstrated need and the resource conflicts are low or

can be mitigated (BLM 1987). This would include initiatives such as the proposed project; therefore, it is determined that the proposed action is in conformance with the RMP.

1.6.2 Notch Butte

The BLM NBCAS is located within the Shoshone Field Office management area and is covered by the Monument RMP (1986). Decisions in the plan that affect this multiple-use area do not address site-specific projects such as the one being proposed; however, it does state that the lands will be managed under the principles of multiple use and sustained yield, as required by FLPMA. Any valid use, occupancy, and development of the public lands, including but not limited to those requiring rights-of-way, leases, and licenses, will be considered, subject to applicable environmental review procedures (BLM 1986). This would include initiatives such as the proposed project; therefore, it is determined that the proposed action is in conformance with the RMP.

The BLM NBCAS Plan (BLM 2012) was developed to provide an outline for orderly future development of the site in conformance with the Monument RMP. Under the Notch Butte Communications Site Management Plan, requests for new communication site facilities may be authorized at the discretion of the BLM. The plan governs the development and management of the NBCAS and will be modified in the future as needs and conditions warrant.

1.6.3 Conformance with Greater Sage-Grouse Management Policies and Procedures

The greater sage-grouse was listed as a candidate species in a decision published in the March 5, 2010, Federal Register Notice (USFWS 2010). On September 22, 2015, the U.S. Fish and Wildlife Service (USFWS) made the determination not to list the greater sage-grouse, thereby removing the species from consideration under the Endangered Species Act (ESA). Sage-grouse once were abundant in sagebrush habitats of the western United States and Canada, but the bird and its habitat have declined in abundance. Reductions in sage-grouse populations in Idaho and elsewhere throughout its range are strongly associated with habitat degradation and fragmentation. General threats to sage-grouse habitat include wildfire and prescribed burning, infrastructure development, power lines, wind farms, livestock impacts, human disturbance, climate change, and conifer encroachment (Gillan and Strand 2010).

The USFWS concluded the primary threats listed for greater sage-grouse in Idaho were wildfire, invasive species, and infrastructure development. A cluster of priority habitat areas exist in Idaho, due to the state's location at the northern edge of the Great Basin. Habitat in the central part of the state functions as a hub for genetic connectivity between the eastern and western portions of the species' range. About two-thirds of Idaho's sage-grouse habitat is federally owned.

The proposed project must meet the BLM's objectives and goals for the greater sage-grouse, as stated in the Record of Decision for the BLM Idaho and Southwestern Montana Greater Sage-Grouse Land Use Plan Amendment/Environmental Impact Statement (LUPA/EIS) (BLM 2015). Analysis of this proposed project's potential impacts to greater sage-grouse is discussed in detail in Section 3.4 (Special Status Species) of this document.

1.7 Legal Authorities

- The Boise Project was authorized under the Reclamation Act of 1902, June 17, 1902 (as amended and supplemented) (Anderson Ranch, Arrowrock, Boise River Diversion, and Black Canyon); P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939.
- The Minidoka Project was authorized under the Reclamation Act of 1902, June 17, 1902 (as amended and supplemented) (Minidoka, American Falls, Jackson Lake, Island Park and Grassy Lake); P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009, 123 Stat. 1348, Sec. 9603.
- Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.).
- Telecommunications Act of 1996 (47 U.S.C. 332).

1.8 Regulatory Compliance

Various laws, executive orders, and Secretarial orders apply to the Proposed Action and are summarized below. The legal and regulatory environment within which the Federal activity would be conducted depends on which alternative is implemented.

1.8.1 National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) requires that the Action Agency determine whether there are any environmental impacts associated with proposed Federal actions. If there are no significant environmental impacts, a Finding of No Significant Impact (FONSI) can be signed to complete the NEPA compliance.

1.8.2 National Historic Preservation Act of 1966

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires that Federal agencies consider the effects that their projects have on properties eligible for or listed on the National Register of Historic Places. The 36 Code of Federal Regulations (CFR) 800 regulations provide procedures that Federal agencies must follow to comply with the NHPA. For any undertaking, Federal agencies must determine if there are properties of National Register-quality in the project area, the effects of the project on those properties, and the appropriate mitigation for adverse effects. In making these determinations, Federal agencies are required to consult with the State Historic Preservation Office (SHPO), Native American tribes with a traditional or culturally significant religious interest in the project area, the

interested public, and in certain cases, the Advisory Council on Historic Preservation (ACHP).

1.8.3 Executive Order 13007: Indian Sacred Sites

Executive Order (EO) 13007, dated May 24, 1996, instructs Federal agencies to promote accommodation of access to, and protect the physical integrity of, American Indian sacred sites. A sacred site is a specific, discrete, and narrowly delineated location on Federal land. An Indian tribe or an Indian individual determined to be an appropriately authoritative representative of an Indian religion must identify a site as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion. However, this is provided that the tribe or authoritative representative has informed the agency of the existence of such a site.

1.8.4 Secretarial Order 3175: Department Responsibilities for Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States (with the Secretary of the Interior acting as trustee) for Indian tribes or Indian individuals. Examples of ITAs are lands, minerals, hunting and fishing rights, and water rights. In many cases, ITAs are on-reservation; however, they may also be found off-reservation.

The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian tribes or Indian individuals by treaties, statutes, and EOs. These rights are sometimes further interpreted through court decisions and regulations. This trust responsibility requires that officials from Federal agencies, including Reclamation, take all actions reasonably necessary to protect ITAs when administering programs under their control.

1.8.5 Executive Order 12898: Environmental Justice

EO 12898, dated February 11, 1994, instructs Federal agencies, to the greatest extent practicable and permitted by law, to make achieving environmental justice part of its mission by addressing, as appropriate, disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. Environmental justice means the fair treatment of people of all races, income, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental impacts resulting from the execution of Federal agency programs, policies, and activities.

1.8.6 Executive Order 13514: Federal Leadership in Environmental, Energy, and Economic Performances

EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, seeks to establish an integrated strategy toward sustainability in the Federal Government. Section 8(i) of the EO requires that as part of the formal Strategic Sustainability Performance Planning process, each Federal agency evaluate agency climate change risks and vulnerabilities to manage both the short- and long-term effects of climate change on the agency's mission and operations. Section 5(b) of the EO specifies that the Chair of the Council on Environmental Quality (CEQ) shall issue instructions to implement the order (CEQ's *Federal Agency Climate Change Adaptation Planning: Implementing Instructions*, issued March 4, 2011) and provide implementing instructions to be used by Federal agencies in climate change adaptation planning.

1.9 Scoping of Issues and Concerns

Scoping is an early and open process used to obtain information that helps identify issues and concerns related to a proposed action, the affected public and geographical area, alternatives, and constraints in the NEPA process.

In March and April 2015, BLM and Reclamation mailed a scoping document to more than 80 agencies, Indian Tribes, members of Congress, organizations, and individuals, soliciting their help in identifying any issues and concerns related to the Proposed Action. BLM and Reclamation received comments from three entities: Wildlands Defense, Idaho National Guard and Intermountain Communications. The comments in their entirety and BLM/Reclamation's responses are presented in Appendix B.

Chapter 2 ALTERNATIVES

2.1 Introduction

This chapter describes the alternatives analyzed in this EA: Alternative A – No Action, Alternative B – Proposed Action, and Alternative C – Private Land Option, Bennett Mountain.

2.2 Alternative Development

The alternatives presented in this chapter were determined by the scope of analysis. The scope of the project was defined by the purpose and need for the project, as described in Chapter 1, and the issues developed during internal, public, and tribal scoping. Using this information, the range of developed alternatives include a no-action alternative and two alternatives that consider different options for the proposed installation of microwave towers on Bennett Mountain (both public and private lands) and Notch Butte and associated equipment, with additional communication equipment placed at Reclamation Office facilities.

2.3 Description of Alternatives

2.3.1 Alternative A – No Action

Under the No Action alternative, the proposed microwave communication facilities on Bennett Mountain and Notch Butte, as well as the additional communication equipment at Reclamation office facilities, would not be constructed. Reclamation and BPA dam facilities would continue to operate as they have previously under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication (some of it being leased lines through several vendors) would continue. The integrity of this aging infrastructure could be compromised in the future due to equipment becoming more antiquated and difficult to maintain. The potential unavailability of spare parts and technical support will negatively affect the reliability of the system. Additionally, Reclamation would not comply with its current and future NERC/WECC, CIP, and EACSS requirements.

2.3.2 Alternative B – Proposed Action

Under Alternative B, Reclamation would construct microwave communication facilities at the BLM-designated Bennett Mountain and Notch Butte Communication Sites, and locate additional communication equipment at Reclamation office facilities.

2.3.2.1 Bennett Mountain

Reclamation would install additional microwave radios and dishes in an existing BLM BMCAS and fire lookout footprint on public land to convert to a centrally operated SCADA system. This installation would enable Reclamation to comply with NERC/WECC, CIP, and EACSS standards and coordinate with the BPA on an improved microwave system from eastern Idaho to the Boise area. The proposed location for this facility includes the location of the BLM fire lookout located on the following described public land:

Boise Meridian, Elmore County, Idaho,
T. 2 S., R. 9 E.,
Section 18: A portion of the SW¼NW¼.

The proposed location of the facility and existing access route is depicted in Figure 2-1.

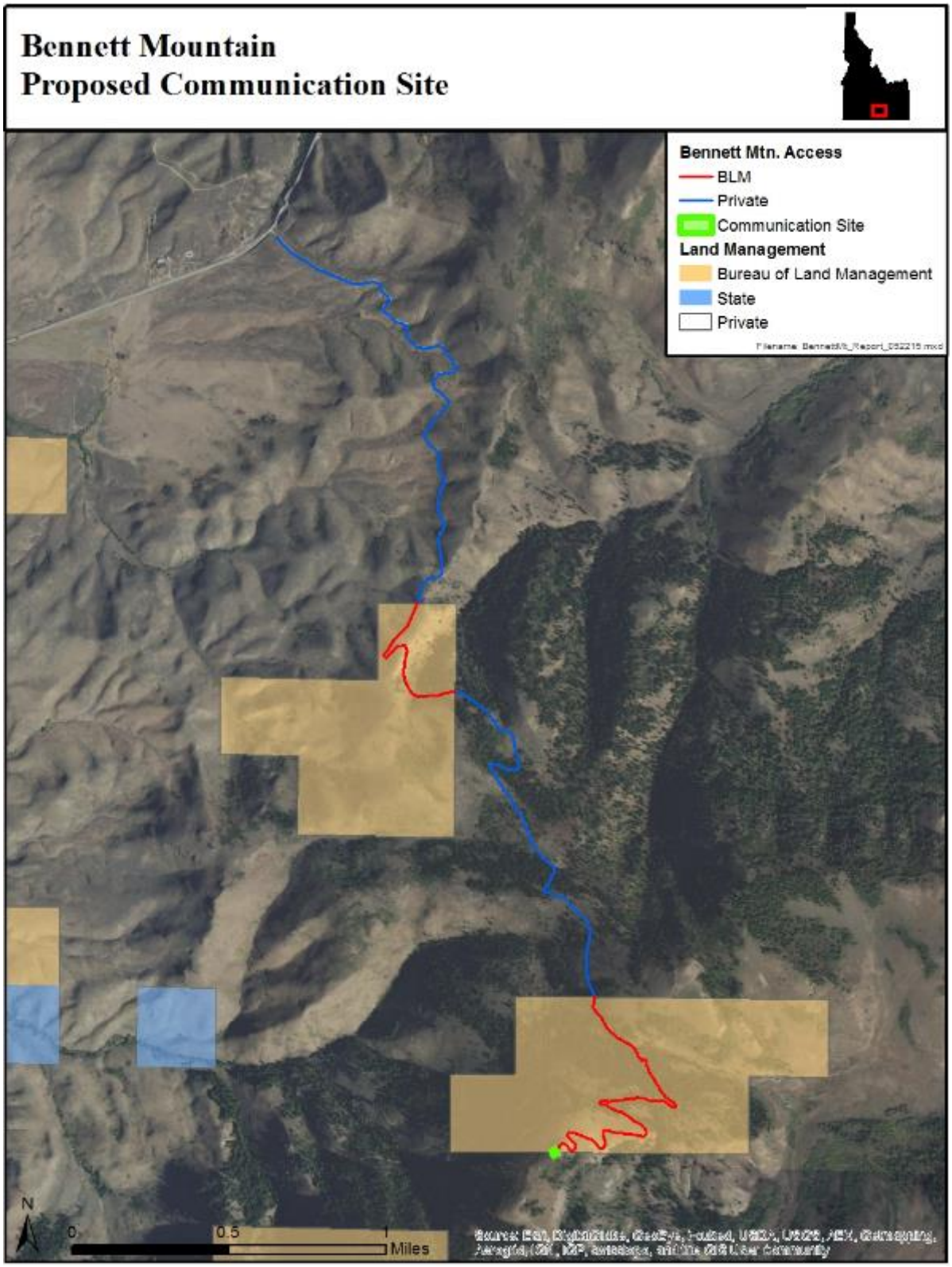

Figure 2-1. Proposed location of Bennett Mountain communication facilities

The existing BLM fire lookout structures (cinder block building, two small ancillary buildings, poles, etc.) would be dismantled, removed from the site, and disposed of properly. A 40-foot x 25-foot area would be leveled and compacted with gravel to fit the dimensions of two 12-foot x 24-foot pre-cast concrete equipment buildings. An area approximately 30 feet wide x 30 feet long x 3 feet deep would be excavated for the tower base, followed by the placement of concrete forms, wrapping and placement of rebar, and installation of ground wires. Concrete would then be placed and finished. Once the concrete has cured, a 100-foot tall, four-legged, self-standing galvanized steel tower (with platforms) would be installed on the base. Five high-performance microwave dishes, grey in color, would be installed on the tower at locations necessary to accommodate the needed communication paths. The five microwave dishes include: one 6-foot-diameter, two 8-foot-diameter, and two 10-foot-diameter. An ice bridge would be installed connecting the tower and equipment buildings.

Commercial power would be provided to the facility with a buried powerline from a transformer located on adjacent private lands. Back-up emergency power would be provided by a 60 kW generator fueled by one 4,500-gallon propane tank above ground. The tank will be painted a color that blends in with the local landscape. A temporary construction area measuring approximately 170 feet x 170 feet would be needed during construction of the facility. All construction waste, including trash, litter, garbage, and other solid waste, would be removed to a disposal facility authorized to accept such material. Overall ground disturbance is estimated to be less than 1 acre.

Access to the proposed communication facility would be via existing roads. Once construction of the proposed facility is completed, Reclamation anticipates accessing the site three to five times a year for maintenance. Emergency access would be conducted as necessary. The facility would be accessed by truck during the snow-free season and, if required during the snow season, a snow cat would be utilized.

2.3.2.2 Notch Butte

There are six communication facilities on Notch Butte, none of which are owned by Reclamation. Due to Reclamation's need to comply with requirements for critical infrastructure protection and installation of microwave radios and dishes, co-locating a new Reclamation tower in the current footprint of the NBCAS is proposed,. The proposed location for this facility is on the following described public land:

Boise Meridian, Lincoln County, Idaho,
T. 6 S., R. 17 E.,
Section 22: A portion of the NE¼SE¼.

The proposed location of the facility and existing access is depicted in Figure 2-2.

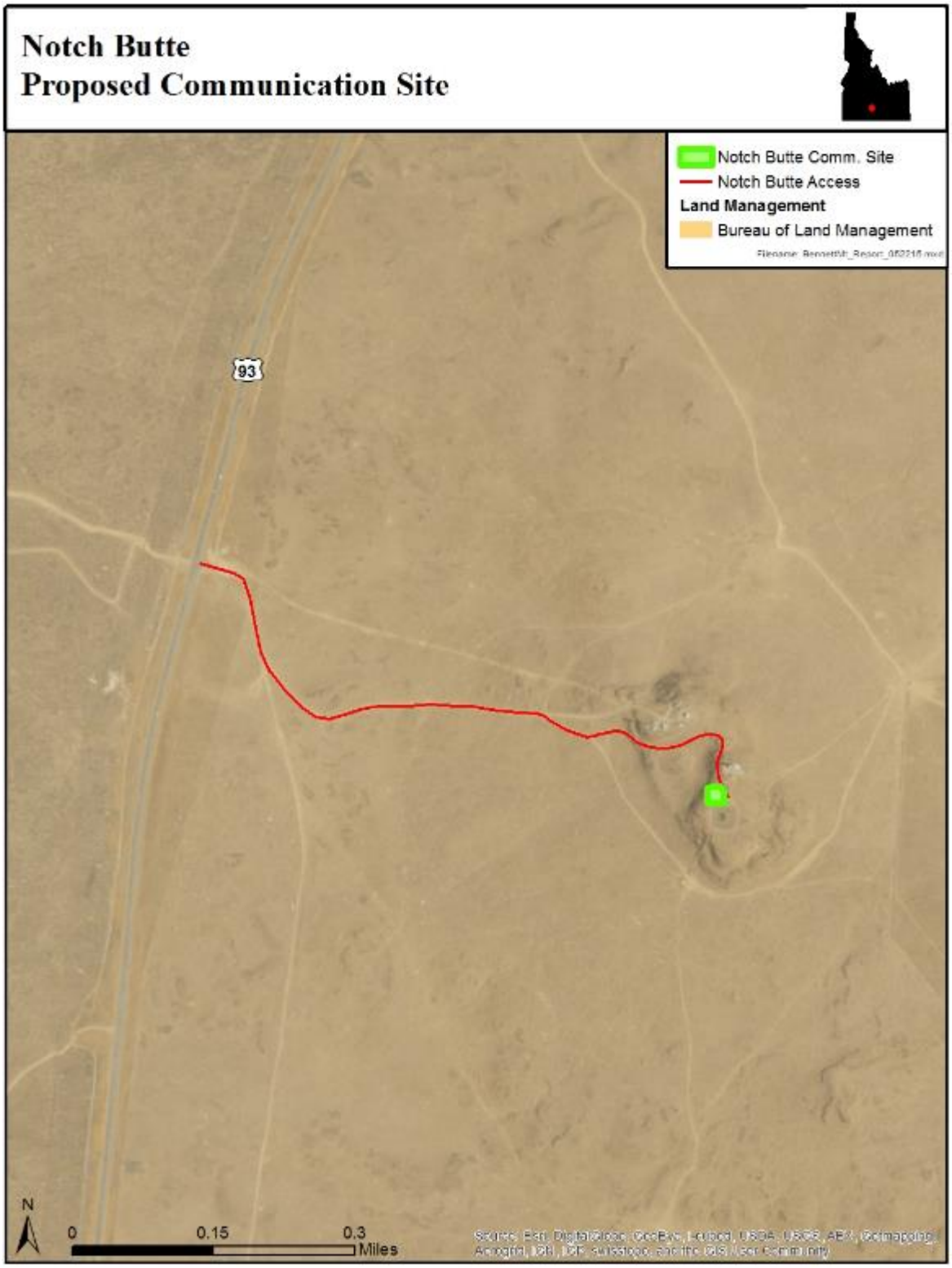

Figure 2-2. Proposed location of Notch Butte communication facilities

Construction of the communication facility would be similar as that described for Bennett Mountain. Four 10-foot-diameter, high-performance microwave dishes would be installed on the tower.

Access to the location would be via existing roads. Minor improvements would be necessary along the secondary access road leading from the primary access road to the proposed location to allow for the safe transportation of the proposed improvements (tower and buildings). Improvements would consist of grading to provide a smooth travel surface. This would occur only to the extent practicable to facilitate safe transportation of the improvements.

Commercial power would be provided by a powerline owned by Idaho Power Company. The existing powerline extends from the northern portion of the NBCAS to the State of Idaho communications facility located on the southern portion of the site. The existing powerline currently doesn't have the capacity to provide the necessary power for Reclamation's proposed communication facility. Therefore, the powerline would need to be upgraded, the existing structures (poles) would need to be replaced, trenching for underground powerline would need to occur and an additional 100 meters of underground powerline within a three inch conduit would need to be extended to Reclamation's proposed location. The two replacement structures would follow the existing alignment and continue to occupy Idaho Power's existing right-of-way. The extended portion would cross over in a southwesterly direction from the State of Idaho's communication facility to Reclamation's proposed location. Idaho Power Company will apply under separate application for the amendment of their existing right-of-way.

The replacement structures would be wooden single-pole structures approximately 60 feet tall, placed immediately adjacent to the existing structures, as practical, to minimize ground disturbance. The new extension structure would also be a wooden single-pole structure and would be placed within the fenced area at Reclamation's proposed location. Structures would be installed in accordance with raptor-safe standards specified in the Avian Power Line Interactive Committee (APLIC) 2006 Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Idaho Power Company's Avian Protection Policy (Idaho Power Company 2015). The existing wooden structures would be cut off near ground level and associated hardware removed. All material would be salvaged or removed to a state-approved landfill. Excavations for the structures would be done with a vehicle-mounted power auger (where the soils permit) or a backhoe. If rocky areas are encountered, blasting may be required. If blasting is necessary, appropriate safety guidelines would be followed, as required by state and Federal regulations relating to blasting operations. Soil removed from holes will be properly stockpiled, according to Best Management Practices (BMPs), in the work area and used to backfill holes. All remaining soil not needed for backfilling would be spread in the work area. It is usually good to place a crust or a soil-stabilizing BMP to reduce erosion of the top pile, until spread out. The powerline would be accessed via existing roads and trails. No new access or service roads are necessary.

The BLM Notch Butte Communications Site Management Plan limits the size of microwave dishes to 8 feet in diameter. For Reclamation's and BPA's communication needs, 10-foot-diameter dishes are required. The Notch Butte Communications Site Management Plan would be amended to allow the larger-sized microwave dishes.

As a mitigation measure and design feature to offset the impact associated with additional anthropogenic disturbance in general habitat for the greater sage grouse, BOR will implement a forbe planting at the East rim of Ririe reservoir within the Tex Creek WMA. The East rim of Ririe reservoir within the Tex Creek WMA, managed by BOR, has been delineated by the BLM as a "sage grouse priority conservation area" and has similar greater sage grouse protective status to Notch Butte. BLM and BOR will collaboratively identify 5 acres of known sage grouse "lekking and rearing" habitat within the Tex Creek WMA (with the assistance of the IDFG) and plant the area with a variety of recommended forbs. This could be completed in May of 2017 using the Montana DNR nursery in Missoula as the plant/forb source. Most of the plants grown at this facility are suitable for the elevation and climate at Tex Creek. Additionally, Tex Creek should have good plant success due to its higher moisture level in the soil. The BLM Shoshone Field office would coordinate and monitor the plan with BOR. Seedling planting would occur within areas that currently have a limited or reduced forb component. This offsite mitigation is intended to result in a net overall benefit for sage-grouse.

2.3.2.3 Reclamation Office Facilities

Additional microwave equipment would be installed at the following Reclamation office locations (see Figure 2-3) in order to complete the communication links to the Black Canyon Control Center.

Pacific Northwest Regional Office

1150 North Curtis Road, Suite 100
Boise, Idaho 83706-1234

Middle Snake Area Office

230 Collins Road
Boise, Idaho 83702

Upper Snake Field Office

470 22nd Street
Heyburn, Idaho 83336

The additional microwave equipment would be attached to existing buildings at the Reclamation office facilities.

For the Pacific Northwest Regional Office and Middle Snake Area Office locations, a 4- to 6-foot tall tripod tower will be installed on the roof with a 6-foot in diameter microwave dish,

grey in color, installed on the tower at a location necessary to accommodate the needed communication path.

For the Upper Snake Field Office location, an area approximately 18 feet wide x 18 feet long x 3 feet deep would be excavated for the tower base, followed by the placement of concrete forms, wrapping and placement of rebar, and installation of ground wires. Concrete would then be placed and finished. Once the concrete has cured, an 80- to 100-foot-tall, three- or four-legged self-standing, galvanized steel tower (with platforms) would be installed on the base. One 6- to 8-foot high-performance microwave dish, grey in color, would be installed on the tower at a location necessary to accommodate the needed communication path. An ice bridge would be installed connecting the tower and office building.

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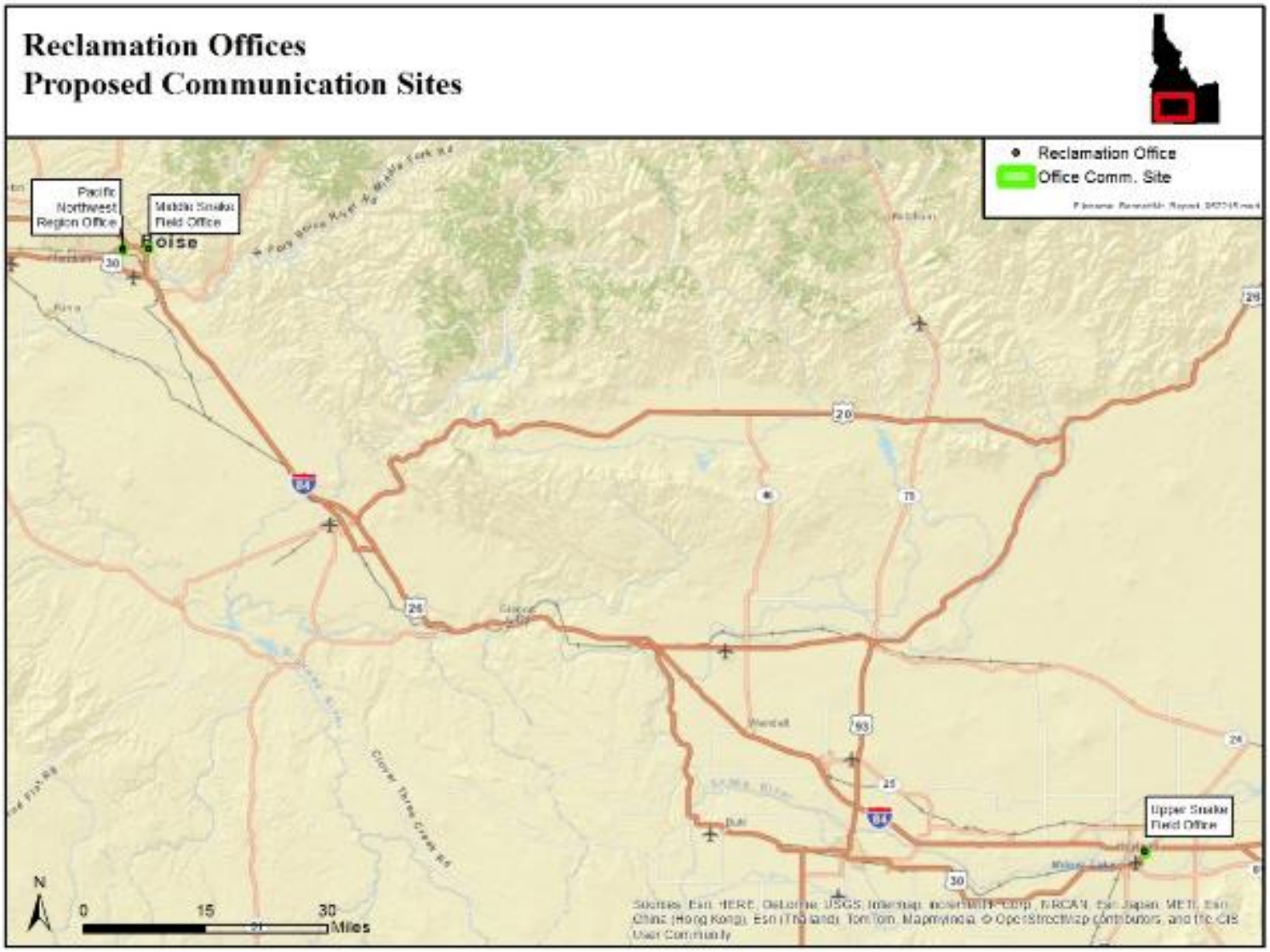

Figure 2-3. Proposed microwave communication locations at Reclamation offices

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2.3.3 Alternative C – Private Land Option, Bennett Mountain

Alternative C is the same as Alternative B, except that the proposed microwave communication facilities on Bennett Mountain would be located on privately owned lands directly adjacent to the BLM-designated BMCAS, rather than on public lands, and there would not be the removal of any existing structures. The proposed location for this facility is located on the following described private land:

Boise Meridian, Elmore County, Idaho,
T. 2 S., R. 9 E.,
Section 18: A portion of the NW¼SW¼.

The proposed location of the facility and existing access route is depicted in Figure 2-1. The exact facility site is just south of the one depicted in Figure 2-1 on private land.

2.4 Alternatives Eliminated from Consideration

Security requirements necessary for the proper protection and operation of the Bennett Mountain and Notch Butte communication facilities limit co-location within other existing Federal, state, or local facilities. Consequently, those existing state or private communication locations were not considered as viable alternatives.

Reclamation considered the purchase and/or lease of land at certain elevation sites (as to keep the necessary line-of-sight requirements that dictates these communication sites be at high elevations), but these were either already occupied or not available.

Use of other types of communication options (fiber optic, etc.) were considered, but did not meet the agency requirements/constraints for such communication.

2.5 Actions Considered for Cumulative Impacts

Cumulative Effect of Impact is defined as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (40 CFR 1508.7). The CEQ interprets this regulation as referring only to the cumulative impact of the direct and indirect effects of the proposed action and its alternatives when added to the aggregate effects of past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Past, present, and reasonably foreseeable actions identified in the area (public or private) that would adversely affect the same resource area evaluated in this EA would be additive effects to the proposed project. Actions considered for cumulative impacts are identified for each resource in Chapter 3 Affected Environment and Environmental Consequences.

2.6 Summary Comparison of the Environmental Impacts of the Alternatives

The environmental impacts, including proposed mitigation, of Alternatives B and C are compared in

Table 2-1 against the environmental impacts that would result under Alternative A – No Action. The environmental consequences of the alternatives arranged by resource are described in detail in Chapter 3. The terms environmental consequences and environmental impacts are synonymous in this document.

Table 2-1. Summary of environmental effects of actions

Resource	Alternative A – No Action	Alternative B – Proposed Action	Alternative C – Private Land Option, Bennett Mountain
Vegetation (Including Invasive Species)	The No Action alternative would not adversely affect vegetation or introduce additional noxious weeds within the project area. Vegetation in the Assessment Areas would continue to persist as they are currently, as no ground disturbances would occur. Continued monitoring and control of noxious weeds would be performed as needed in these areas.	The Proposed Action alternative would not adversely affect vegetation or introduce noxious weeds within the project area. Negligible impacts are expected to the on-site vegetation community from construction; Implementation of BMPs and the stabilization and rehabilitation efforts described in Reclamation's project area would reduce the potential of weeds becoming established in nearby areas. A BLM-recommended seed mix would be utilized to seed and rehabilitate any areas disturbed after the construction phase. Removal of the BLM fire lookout and construction of the towers would cause negligible impacts to the on-site vegetation community. For the Notch Butte Assessment Area, the patch of Thurber's needlegrass located immediately east of the water storage tank would be avoided during construction activities. Any temporary staging area at the Notch Butte location should be located west of the water storage tank. The Reclamation office sites would not be impacted by any vegetation removal, as the towers will be located on top of existing facilities and in the ware yard.	Activities or environmental consequences would be the same as those described in Alternative B and would eliminate the removal of the BLM fire lookout. No adverse impacts to vegetation would occur.
Wildlife	Wildlife, migratory birds, raptors and bats would not be affected by the No Action alternative and would continue to exist within	Some temporary impacts to wildlife may occur, such as noise and activity that would cause wildlife to avoid the area in the short term. Mitigation measures to reduce impacts from	Some temporary impacts to wildlife may occur, such as noise and activity that would cause wildlife to avoid the area in the short term; Mitigation measure to reduce impacts

Resource	Alternative A – No Action	Alternative B – Proposed Action	Alternative C – Private Land Option, Bennett Mountain
	the Assessment Areas and Reclamation office locations as they currently occur.	collisions on migratory birds, raptors, and bats are incorporated. In addition mitigation for electrocution, collisions and nesting birds for powerlines (Notch Butte) are addressed.	from collisions on migratory birds, raptors and bats are incorporated.
Special Species Status	Field reconnaissance found no evidence of threated endangered or sensitive species in the project areas. The conditions under the No Action alternative would be consistent with current potential impacts.	Field reconnaissance found no evidence of threatened or endangered species within the Assessment Areas. Type 2 sensitive species within the Assessment Area would experience impacts, and with the incorporated mitigation measures, impacts from collisions on migratory birds, raptors, and bats are considerably reduced. This is in addition to mitigation for electrocution, collisions, and nesting birds for powerlines (Notch Butte).	Field reconnaissance found no evidence of threatened or endangered species within the Assessment Areas. Type 2 sensitive species within the assessment are would experience significant impacts, and mitigation measures to reduce impacts from collisions on migratory birds, raptors, and bats are incorporated.
Recreation	There would be no short- or long-term impacts to the immediate area. Recreation usage may only be impacted by the aging infrastructure on the site.	Limited traffic disruptions during component transportation and delivery would be the only recreational impacts for the proposed action. Reclamation office facilities are not used for recreation and were not considered for analysis.	Impacts to recreation would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternative B and C, the impacts would not differ. Impacts to recreation at Notch Butte would be the same as those described in Alternative B.
Visual Resources	There would be no short- or long-term impacts to the immediate area.	The proposed actions for the Bennett Mountain, Notch Butte, and three Reclamation offices would not impact visuals more than what already exists in the area of each site. Cumulative impacts of installing a communication tower at the USFO would have noticeable visual resource impacts because it would be significantly taller and more angular than other adjacent structures, and because of the size of the microwave dish mounted on it.	Visual Impacts would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternative B and C, the impacts would not differ. Visual Impacts at Notch Butte would be the same as those described in Alternative B.
Cultural Resources	No cultural resources would be	Bennett Mountain – The removal of the	No historic properties were identified at the

Resource	Alternative A – No Action	Alternative B – Proposed Action	Alternative C – Private Land Option, Bennett Mountain
	affected if the No Action alternative were chosen. There would be no short- or long-term effects and no direct, indirect, or cumulative effects to cultural resources.	existing fire lookout on Bennett Mountain is an associated undertaking to the siting location of the new communication tower. A cultural resource inventory was complete and consultation with SHPO generated a Memorandum of Agreement which defines the mitigation that will be incorporated with the proposed action. Although there will be an adverse effect to this historic lookout, the mitigation efforts would minimize that impact through recordation and interpretive elements and the preservation of a similar lookout on South Mountain. Notch Butte – A cultural resources inventory was performed, which yielded two resources and one site eligible for the National Register of Historic Places (NRHP). However, neither occur within the project area and will be avoided. Because of that avoidance, no eligible historic properties would be affected as a result of this action. Reclamation office sites would not be impacted and do not qualify as historic properties under the National Historic Preservation Act.	Alternative C location. There is no evidence that an adverse effect to a historic property, directly or indirectly, would occur as a result of the proposed action.
Sacred Sites	There would be no short-term or long-term impacts to Indian sacred sites in any of the project locations. None of the alternatives would be constructed and there would be no need for ground disturbance for any potential excavation, equipment	In all project locations, potential impacts to Indian sacred sites can only be dealt with in a generalized fashion due to the fact that the specific location and nature of sacred sites within the proposed project area of potential effect (APE) is unknown. If Indian sacred sites are located within the proposed project APE, their integrity can be compromised not only by	Impacts to sacred sites would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternative B and C, the impacts would not differ. Impacts to sacred sites at Notch Butte would be the same as those described in Alternative B.

Resource	Alternative A – No Action	Alternative B – Proposed Action	Alternative C – Private Land Option, Bennett Mountain
	staging areas, deposit areas, or new roads. The existing conditions would remain intact and would not be affected.	physical disturbances, but also audio or visual intrusions that change the association, feeling, or character of the site. If this is the case, their sacredness and overall importance as a sacred or religious site can be reduced. EO13007 does not authorize Federal agencies to mitigate the impacts of their own actions upon Indian sacred sites. Nevertheless, it does direct them to avoid adverse impacts to the extent possible.	
Indian Trust Assets (ITAs)	The No Action alternative would have no impact on ITAs for Bennett Mountain, Notch Butte, or Reclamation offices.	The proposed action for Bennett Mountain, Notch Butte, and Reclamation offices would not impact ITAs. The absence of response from the tribal scoping leads Reclamation to assume that there would be no effects to tribal hunting and fishing rights.	Impacts to ITAs would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternative B and C, the impacts would not differ. Impacts to ITAs at Notch Butte would be the same as those described in Alternative B.
Environmental Justice	Under the No Action alternative, there would be no impacts on environmental justice due to the proposed facilities not being constructed.	The proposed action for the Bennett Mountain, Notch Butte, and Reclamation offices would not result in any disproportionate adverse impacts on low-income and/or minority populations.	Environmental justice impacts would be the same as those identified in Alternative B.
Socio-economics	The No Action alternative would have no impacts on the operation or existing system. They would continue as they have been in the past.	Construction would affect involved contractors positively in the short term, but no economic gains would be expected to occur in the local area. There are no cumulative impacts expected from the proposed action.	Socioeconomic impacts would be the same as those described in Alternative B.
Climate Change	The No Action alternative would have no effect on climate change in the short or long terms. Reclamation and BPA dam facilities would continue to operate as they have previously	The proposed action for Bennett Mountain, Notch Butte, and to a lesser extent, Upper Snake Field Office, would require construction, which is done with heavy equipment. The operation of this equipment uses fossil fuels, which contribute to climate change. The minor	Climate change impacts (both to climate change and from climate change) would be the same as those described in Alternative B.

Resource	Alternative A – No Action	Alternative B – Proposed Action	Alternative C – Private Land Option, Bennett Mountain
	under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication would continue to be used. In the long term (greater than 10 years), climate change could alter precipitation patterns and river hydrology. This could result in potential increases or decreases in the magnitude and duration of flow events, alter the timing of snowmelt, increase or decrease flow regimes, and change river level. All of these factors could influence physical sites and biological communities, affecting species assemblages, timing, and use of the project area, and could also lead to changes in noxious and invasive weed cover. Additionally, climate change could indirectly affect soil erosion rates due to more or less precipitation. These would occur regardless of any action.	amount of fuel used for this short period of construction time would not be expected to affect climate change. There would be no effects of climate change from the construction of the communication equipment at the Regional office. The same long-term impacts as with the No Action alternative would take place with Alternative B. The use of restoration techniques and maintenance of project facilities would potentially reduce impacts on soil erosion and weed infestation. Past, present, and reasonably foreseeable future impacts of livestock grazing and the potential of future increases of communication facilities, when added to the current impact of this proposed project on climate change, would be minimal. Greenhouse gas emissions would be limited and their effects would be minimized through restoration efforts such as reseeding with native mixes and weed control.	

Chapter 3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This section presents the existing environment (i.e., the physical, biological, social, and economic values and resources) of the project areas, issues analyzed, potential impacts to the analyzed resources resulting from the Proposed Action, and mitigation that could be applied which would reduce those potential impacts. Mitigation measures and design features proposed in this analysis and would be included in the FONSI to prevent potentially significant impacts. Application of the mitigation measures and design features to the Proposed Action would then be carried forward into the Decision Record as a condition of approval of the proposal. Consideration of some of these items is to ensure compliance with laws, statues, or executive orders that impose certain requirements upon all federal actions. Other items are relevant to the management of public lands in general.

Impacts caused by the Proposed Action are limited to those events described in this chapter. The influence of past actions are not specified in this document but may be reflected in the current conditions that are part of the No Action alternative. Cumulative impacts will also be assessed for each resource. Many times, a project would have some degree of effect upon a resource or concern, but that effect doesn't approach any threshold of significance, nor does it increase cumulative impacts by a measureable increment. Such effects are described in the rationale for dismissal from analysis.

The proposed microwave communication facility locations have been defined as Assessment Areas or areas of analysis/impact and include the proposed tower locations, which are located within existing tower footprints, as well as a 600-foot radius area surrounding the proposed tower locations, and any additional impact areas such as staging areas and construction of powerlines.

3.2 Vegetation

3.2.1 Affected Environment

Vegetation communities in both the Bennett Mountain and Notch Butte Assessment Areas, as defined in Chapter 2, are diverse and are primarily influenced by soils, precipitation, wildland and prescribed fires, post-fire vegetation treatments, weather, livestock grazing, invasive plant introduction and spread, and off-road vehicle (ORV) use. Vegetation within these Assessment Areas is minimal, as much of the ground is disturbed or bare, with rock/gravel surfaces installed during past communication facility construction. Vegetation at the Reclamation office locations consists primarily of municipal features, including manicured lawns with some forbs, shrubs, and trees that are generally native.

Native and Non-Native Plants

Native vegetation includes plants endemic or indigenous to a given area or plants that have developed and occur naturally for many years in an area.

Non-native vegetation is vegetation introduced to areas outside their native distributional zone, deliberately or accidentally. Non-native species or weeds can have various effects (e.g., displace native plants, degrade wildlife habitat, reduce recreational opportunities, impact water quality and runoff and sedimentation) on the local ecosystem. Noxious weeds are designated by state law or county ordinance because they can cause extraordinary negative economic and ecological impacts, and control is usually difficult and expensive. All landowners and managers are required by the State of Idaho to control noxious weeds on their property per Idaho Statutes, specifically Title 22 (Agriculture and Horticulture), Chapter 24 (Noxious Weeds) (ISDA 1999).

Special Status Plants

Special Status Plants are plant species considered at-risk on public lands that BLM manages. They are sensitive species, as designated by the BLM State Director per BLM Policy Manual 6840, and are managed under the special status species policy. This policy aims to conserve listed species and their ecosystems and to ensure that actions taken by the BLM are consistent with the conservation of, and do not contribute to the listing of, any species listed under the ESA. BLM's Special Status Plant categories include:

Type 1. Federally listed threatened or endangered species and designated critical habitat

Type 2. These are species that have a high likelihood of being listed in the foreseeable future due to their global rarity and significant endangerment factors. Species also include USFWS Proposed and Candidate species, ESA species delisted during the past 5 years, ESA Experimental Non-essential species, and ESA Proposed Critical Habitat.

Type 3. Range-wide or State-wide Imperiled – Moderate Endangerment

These are species that are globally rare or very rare in Idaho, with moderate endangerment factors. Their global or state rarity and the inherent risks associated with rarity make them imperiled species.

Type 4. Species of Concern – These are species generally rare in Idaho, with small populations or localized distribution and currently have low threat levels. However, due to the small populations and habitat area, certain future land uses in close proximity could significantly jeopardize these species.

3.2.1.1 Bennett Mountain Public and Private Lands

The elevation of the Bennett Mountain Assessment Area is approximately 7,321 feet above mean sea level. The terrain in this area has moderately steep slopes, which become very steep as they break to the valley floor below. The north- and east-facing slopes are typically covered with more-dense vegetation comprising a chaparral, conifer, and deciduous tree

complex, depending on aspect, slope, and location (BLM 2001). Vegetation at this location is the same on both the public and private lands.

3.2.1.1.1 **Native Vegetation**

Within a majority of the Assessment Area, the native and non-native vegetative understory is a sagebrush/grass-type community. Surrounding the Assessment Area, a mosaic of Douglas-fir (*Pseudotsuga menziesii*) and quaking aspen (*Populus tremuloides*) dominate the overstory species on the north- and east-facing slopes and within the wetter drainage bottom lands. The major shrubs within the immediate Assessment Area include discontinuous patches of primarily rabbitbrush (*Chrysothamnus* ssp) and sagebrush (*Artemisia* ssp), with surrounding understory including antelope bitterbrush (*Purshia tridentate*), serviceberry, chokecherry (*Prunus virginiana*), and snowbrush (buck brush; *Ceanothus* spp.). These species are intermingled with the grasses known to inhabit this region, including Idaho fescue (*Festuca Idahoensis*), bluebunch wheatgrass (*Pseudoroegneria spicata*), and a large variety of forbs. Some of these forbs include arrowleaf balsamroot (*Balsamorhiza sagittata*), lupine (*Lupinus* spp.), milkvetches (*Astralagus* spp.), penstemon, and phlox. No special status plant (SSP) species are known within the Assessment Area.

In lower elevations surrounding the Assessment Area, some riparian/wetland, grassland, and canyonland communities may exist. There are some areas of basalt cliffs and associated outcroppings with dispersed rubble throughout. The Mount Bennett Hills is a major dividing feature between the grasslands of Camas Prairie to the north and the sagebrush-covered Snake River Plains to the south (BLM 2001).

3.2.1.1.2 **Non-native Vegetation**

Non-native vegetation within Elmore County and potentially within or surrounding the Assessment Area includes these top 10 invasive plants: squarrose knapweed (*Centaurea virgate*), orange hawkweed (*Pilosella auranriaca*), black henbane (*Hyoscyamus niger*), houndstongue (*Cynoglossum officinale*), hoary alyssum (*Berteroa incana*), jointed goatgrass (*Aegilops cylindrica*), musk thistle (*Carduus nutans*), oxeye daisy (*Leucanthemum vulgare*), buffalo bur (*Solanum rostratum*), and yellow toadflax (*Linaria vulgaris*) (University of Idaho Extension 2013). These plants are primarily found in disturbed areas, along trails or roadways. Aside from these top 10, other invasive species within the surrounding Assessment Area may include leafy spurge (*Euphorbia esula*), Dalmatian toadflax (*Linaria dalmatica*), yellow starthistle (*Centaurea solstitialis*), and camelthorn (*Alhagi maurorum*). In lower elevations surrounding the Assessment Area, rush skeletonweed (*Chondrilla juncea*), medusahead (*Taeniatherum caput-medusae*) and cheatgrass (*Bromus tectorum*) are prevalent.

3.2.1.2 Notch Butte

3.2.1.2.1 **Native Vegetation**

The elevation at the BLM-designated NBCAS is approximately 4,340 feet above mean sea level, and the topography is generally rolling hills with rock outcrops, plateaus, and buttes.

Some native shrub steppe vegetation and native grasslands were likely once predominant in the area surrounding Notch Butte; however, wildfires (including the 2007 Red Bridge fire), motorized off-road vehicle (ORV) use, grazing, and other activities have reduced the native vegetation communities within and surrounding the Assessment Area. A review of the Idaho Fish and Wildlife Information System SSP database[1] indicates there are no SSP species in or near the Assessment Area.

3.2.1.2.2 **Non-Native Vegetation**

Vegetation in the Assessment Area includes primarily cheatgrass, Russian thistle (*Kali tragus*), and tumble mustard (*Sisymbrium altissimim*), with small inclusions of remnant native vegetation that are left unaffected. Aside from cheatgrass, Russian thistle, and tumble mustard, other noxious weeds in the area likely include puncture vine (*Tribulus terrestris*), rush skeletonweed, and diffuse knapweed (*Centaurea diffusa*). There are no other known invasive species within the Assessment Area (BLM 2015). Crested wheatgrass (*Agropyron cristatum*) and agricultural fields may be found surrounding the Assessment Area.

3.2.1.3 Reclamation Office Facilities

Native and non-native vegetation at these facilities are all disturbed, manicured lawns and planted native or non-native trees and shrubs, among hard-surface infrastructure (roads, buildings and parking lots).

3.2.2 Environmental Consequences

3.2.2.1 Alternative A – No Action

Reclamation would retain aging infrastructure, and operation and maintenance would continue under currently existing constraints and security measures. Therefore, no ground-disturbing activities would take place at either of the Assessment Areas or the Reclamation Office facilities. Native and non-native vegetation would not be affected in the short or long term by the No Action alternative, as no changes would be made to the existing facilities within the five project areas.

3.2.2.2 Alternative B – Proposed Action

3.2.2.2.1 **Bennett Mountain**

As a result of implementing the Public Lands action, native and non-native vegetation would be affected in the short term by surface impacts related to removal of the existing BLM fire lookout structures and activities associated with construction of the proposed microwave communication facility. Native vegetation would be removed and the potential for non-

[1] Idaho Fish and Wildlife Information System SSP database https://fishandgame.idaho.gov/ifwis/portal/page/species-status-lists (accessed February 2014)

natives to initiate growth may increase. However, steps can be taken to reduce impacts to existing vegetation and the potential for the spread of noxious weeds (see Section 3.2.2.4).

3.2.2.2.2 **Notch Butte**

As previously mentioned, very little in the form of native species exist within the Notch Butte Assessment Area, and much of the area is already disturbed, with numerous invasive plant species. Effects are similar to those identified in the Bennett Mountain Assessment Area, except impacts to vegetation would also include disturbance associated with powerline extension and potential road improvement activities.

3.2.2.2.3 **Reclamation Office Facilities**

The proposed communication equipment would be installed at the PNRO and MSFO locations that have been previously disturbed; therefore, no adverse impacts to any vegetation, including the existing manicured lawns and planted areas, would occur. At the USFO, the construction from the base to installation of the towers would require removal of some existing vegetation, but no adverse impact to vegetation would occur.

3.2.2.3 Alternative C – Private Land Option, Bennett Mountain

3.2.2.3.1 **Bennett Mountain**

As a result of implementing the private land option, native and non-native vegetation may be affected in the short term during construction of the microwave facilities. Implementation of BMPs and stabilization and rehabilitation efforts would reduce the potential for noxious weed establishment in nearby areas in the short and long term. Areas disturbed during project construction would total less than 1 acre, and a recommended seed mix would be utilized to seed and rehabilitate any disturbed areas following completion of the project. Livestock would be grazing in the East Bennett Mountain allotment from July 1 to September 30; depending on construction dates, contractors should be aware that livestock may be in the area. The project is unlikely to affect whether the land is meeting rangeland health standards for vegetation.

Locating the Bennett Mountain site on private land would not change any of the activities or environmental consequences and would simply require permission for access. It would also eliminate the removal of the BLM fire lookout.

3.2.2.4 Mitigation

In order to reduce impacts to Alternative B and C at all locations, in the short and long term, implementation of BMPs during construction and stabilization and rehabilitation following construction efforts would be prescribed for both existing vegetation impacts and potential noxious weed establishment. Areas disturbed during project construction would total less than 1 acre, and a BLM-recommended seed mix would be utilized to seed and rehabilitate disturbed areas following completion of the project.

3.2.2.5 Cumulative Effects

Installation and existence of the microwave towers would have no cumulative impacts to vegetation following initial construction. Over time, provided mitigation for weeds and other BMPs were practiced, vegetation would recover within the general vicinity.

3.3 Wildlife

3.3.1 Affected Environment

Historically, the lands around both Bennett Mountain and Notch Butte have been used for livestock grazing, ORV use, and other recreation activities that may disturb the limited amount of habitat for big game, including deer, elk, and antelope. However, the areas also provide year-round habitat to other game and non-game wildlife, game birds, reptile species, migratory birds, raptors, and bats. Reclamation Office facilities are surrounded by anthropogenic influences, manicured lawns, trees and shrubs, and hard structures like buildings, parking lots, and roads, but still provide sufficient habitat for a variety of wildlife and migratory birds, raptors and bats. No fish species are present within any of the Proposed Action areas.

Migratory Birds, Raptors and Bats

Avian species composition and density in all of the Assessment Areas varies with season and habitat type. Avian species diversity is highest during the spring and summer months, when migrant species are nesting in the area. Species diversity decreases markedly during the fall and winter seasons, when many nesting species move south, out of the area.

Birds are protected by the Migratory Bird Treaty Act (16 U.S.C. 703-712) (Act), which prohibits the act of *take* or *taking* which is defined as “pursue, shoot, shoot at, kill, capture, trap, collect, molest or disturb.” Taking also includes killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior.

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who take, possess, sell, purchase, barter, transport, export or import, at any time or any manner, any eagle alive or dead, or any part, nest, or egg.

3.3.1.1 Bennett Mountain Public and Private Lands

The Bennett Mountain general area includes a diverse variety of big game, game birds, and other wildlife, including reptiles, migratory birds, raptors, and bats. Mule deer (*Odocoileus hemionus*), elk (*Cervus canadensis*), and pronghorn antelope (*Antilocapra americana*) (in the lower elevations) are the primary big game found within the Bennett Mountain area. Greater sage-grouse (*Centrocercus urophasianus*), chukar (*Alectoris chukar*), gray (Hungarian)

partridge (*Perdix perdix*), ruffed grouse (*Bonasa umbellus*), and mourning doves (*Zenaida macroura*) are some of the game birds found within the Bennett Mountain area. Other game and non-game mammals, including black bear (*Ursus americanus*), mountain lion (*Puma concolor*), gray wolf (*Canis lupus*), Coyote (*Canis latrans*), bobcat (*Felis rufus*), and red fox (*Vulpes vulpes*) occur as the more common predators in the area. Other mammal species present in the Bennett Mountain Area include ground squirrel (*Urocitellus columbianus*), yellow-bellied marmot (*Marmota flaviventris*), badger (*Taxidea taxus*), cottontail rabbit (*Sylvilagus nuttallii*), snowshoe hare (*Lepus americanus*), red squirrel (*Tamiasciurus hudsonicus*), and chipmunk (*Tamias minimus*). Reptiles expected to occur in the area include the western fence lizard (*Sceloporus occidentalis*), sagebrush lizard (*Sceloporus graciosus*), and Great Basin rattlesnake (*Crotalus viridis lutosus*).

Migratory Birds, Raptors and Bats

Many Neotropical migratory birds are present during spring, summer, and fall periods of the year, as well as several other non-game bird species, including calliope hummingbird (*Stellula calliope*), Cassin's finch (*Carpodacus cassini*), green-tailed towhee (*Pipilo chlorurus*), and raptors such as ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsoni*), short-eared owls (*Asio flammeus*) and others (See Section 3.4). Several species of bats (See Section 3.4) are also found within the Bennett Mountain Area.

3.3.1.2 Notch Butte

Antelope are the primary big game species within the area, although some mule deer populations may migrate through the area. Greater sage-grouse and mourning doves may be found within the Notch Butte Area. Other mammal species within the NBAS include gray wolf, pygmy rabbit (*Brachylagus idahoensis*) (see Section 3.4), black-tailed jackrabbit (*Lepus californicus*), cottontail, and badger (BLM 2015). Reptiles expected to occur in the area include the western fence lizard, sagebrush lizard, and Great Basin rattlesnake.

Migratory Birds, Raptors and Bats

Migratory birds and some non-migratory birds include loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Athene cunicularia*), short-eared owl, long-billed curlew (*Numenius americanus*), Brewer's sparrow (*Spizella breweri*), sage sparrow (*Artemisiospiza nevadensis*), and sage thrasher (*Oreoscoptes montanus*), among others identified in Section 3.4. The surrounding Notch Butte area also supports habitat for a variety of raptors, including bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*) (See Section 3.4), several hawk species, and at least five different bat species (see Section 3.4) (BLM 2015).

3.3.1.3 Reclamation Office Facilities

Wildlife at the Reclamation Offices may include a variety of migratory song birds, raptors and game birds, red fox (*Vulpes vulpes*), fox squirrel (*Sciurus niger*), raccoon (*Procyon lotor*), and occasionally mule deer and coyote (*Canis latrans*). In addition a variety of migratory song

birds, raptors, bats and game birds may be found within the city limits surrounding these locations.

3.3.2 Environmental Consequences

3.3.2.1 Alternative A – No Action

Under the No Action alternative, Reclamation would retain aging infrastructure, and operation and maintenance would continue under currently existing constraints and security measures. Therefore, no ground-disturbing activities would take place at either Assessment Area or the Reclamation Office facilities. Wildlife would not be affected in the short or long term by the No Action alternative, as no changes would be made to the existing facilities within the five project areas.

3.3.2.2 Alternative B – Proposed Action

Proposed action activities at all project areas would likely temporarily displace smaller game and non-game wildlife and reptile species within the areas in the short term (less than 1 year), due to the noise of the equipment and presence of humans and other construction activity. Various factors, including changes in food sources, shelter, population density, and dispersal effort would determine the severity of impacts to non-listed wildlife. However, within the scope of the potential acres surrounding the Assessment Areas, the Proposed Action will have a negligible effect on wildlife and habitat.

Although commonly referenced in literature as features (communication towers, transmission lines, etc.) potentially having a negative impact on sage-grouse and other game birds, limited research has been done on the effects of different structure types, the influence of topography, habitat conditions, associated infrastructure (i.e., buildings, parking pads, etc.) and related operations and maintenance activities on sage-grouse and other game bird population dynamics. In general, investigations indicate that game birds are more likely to be found in more suitable habitat farther from such structure types.

Migratory Birds, Raptors and Bats

The construction of the structures associated with the microwave communication facilities, as well as construction equipment, may have some positive and negative effects on bird species within the area. Although minimal, compared to the potential negative impacts, the positive impact from towers and telephone poles is that they often provide perching and nesting places for both birds and bats. Bats are analyzed with migratory birds and raptors because they are a flight mammal and are exposed to similar conditions as avian species.

Communication Towers

The placement and operation of communication towers, including tower height, design, and lighting, relative to migratory bird concentration areas, pose a collision hazard to birds and bats, especially some 350 species of night-migrating birds (Manville 2007, 2009). An estimated 4 to 5 million bird-collision deaths at communication towers per year in the United States has been reported by Manville (2005, 2009). More-recently published literature suggests, based on statistically determined parameters, that mortality may be closer to 6.8 million birds per year in Canada and the United States (Longcore et al 2012). The 2000 USFWS communication tower guidelines for Migratory Bird Management reflect some of the most recent research findings (Manville 2013). Other direct impacts may include habitat loss/modification and/or fragmentation.

Indirect negative impacts may occur through non-ionizing electromagnetic radiation (radio frequency and microwaves) emitted by the towers. The energy levels associated with radio frequency and microwave tower radiation are not great enough to cause the ionization of atoms and molecules (FCC 2015). A radio frequency electromagnetic wave has both an electric and a magnetic component (electric field and magnetic field). Biological effects can result from exposure to radio frequency energy, which are produced by heating of tissue and are often referred to as thermal effects.

“There is a growing amount of anecdotal evidence linking effects of non-ionizing electromagnetic radiation from communication towers on nesting and roosting wild birds and other wildlife in the United States. Some peer-reviewed research protocol developed for the U.S. Forest Service by the agency’s Division of Migratory Bird Management is available to study both collision and radiation impacts (Manville 2002). A study in the fields in Spain by Balmori (2005) found strong negative correlations between levels of tower-emitted microwave radiation and bird breeding, nesting, and roosting in the vicinity of electromagnetic locations. Nest and site abandonment, plumage deterioration, locomotion problems, reduced survivorship, and death were documented in house sparrows, white storks, rock doves, magpies, collared doves, and other species. Though these species had historically been documented to roost and nest in these areas, Balmori (2005) did not observe these symptoms prior to construction and operation of the cellular phone towers. Other indirect effects may include reduced breeding/nesting density, habitat and site abandonment, changes

in predator prey relationships, effects on behavior including stress, interruption, modification and disturbance, avoidance, displacement, habitat unsuitability." (Taylor, 2014)

More scientific research needs to be conducted on this topic, but in the meantime the Department of Interior and U.S. Fish and Wildlife Service follow Executive Order 13186 for Responsibilities of Federal Agencies to Protect Migratory Birds, which specifically requires these and other Federal agencies to develop and use principles, standards, and practices which would lessen the amount of unintentional take reasonably attributed to agency actions. The Migratory Bird Act has no provision for allowing an unauthorized take; however, some birds may be killed at structures such as communications towers even if all reasonable measures to avoid it are implemented (See Section 3.4).

Powerlines

Idaho Power Company's Avian Protection Plan focuses on three types of bird/powerline interactions: 1) electrocution, 2) collision, and 3) nesting birds.

Electrocution: Birds are electrocuted when they make contact between two energized conductors or between an energized conductor and grounded hardware, thereby providing a pathway for electricity to flow between two points of contact. Many factors influence electrocution risk, including body size, habitat, age, weather, and powerline configurations with inadequately spaced conductors and/or ground wires. Birds with large wingspans, such as raptors, are more susceptible to electrocution than smaller birds. However, small birds can be electrocuted on transformers or other poles with tightly spaced hardware. Birds using power poles located in open habitats lacking natural perches, have a greater electrocution risk. Habitats with a large prey base are attractive to raptors and have increased use and, therefore, increased electrocution risk. Young birds are less adept at taking off and landing on power poles and may choose more dangerous locations on a pole, increasing their risk. Wet weather can increase electrocution risk, since wet feathers are electrically more conductive than dry feathers and can elicit wing spreading behavior.

Collisions: Many factors influence the incidence of bird collisions with powerlines much like the tower structures described above. Larger, less-maneuverable birds, raptors, and flock migrants such as Canada geese (*Branta canadensis*), and species that fly at high speeds and low altitudes are frequently involved in collisions. Powerlines located near aquatic habitat have increased concentrations of birds increasing the risk of collisions. Daily use of an area with powerlines also increases risk as flight patterns across an area increase.

Nesting Birds: Osprey are the most common raptor using power poles for nesting; however, red-tailed hawk (*Buteo jamaicensis*), golden eagle, and ferruginous hawk nests are also occasionally found.

Bats

To better understand the response of bats to electromagnetic radiation, and identify an optimum signal capable of deterring bats, will require more studies. However a study by

Nicholls and Racey (2009) to determine how to deter bats from wind turbines demonstrated that pulsed electromagnetic radiation from a small, affordable and portable radar system can reduce bat activity within a given area. More parameters, such as the frequency, pulse length/pulse of wavelength, repetition rate, target size, and power output of the signal need to be studied, in addition to producing a multidirectional signal. Furthermore, observations of captive bats have noted their aversion to even a moderate infra-red heat source Reeder and Cowles RB (1951). Therefore, it is possible that thermal induction, resulting from electromagnetic exposure in the vicinity of radar installations, may provide an inhospitable thermal regime for foraging bats, which could vary from discomfort to hyperthermia depending on strength and the duration of exposure.

3.3.2.2.1 **Bennett Mountain**

At Bennett Mountain, the proposed action area is less than 1 acre, so the loss of 1 acre, or less than one-tenth of a percent of the year-round habitat area, is expected to have a negligible impact on big game species. Game birds, other game, and non-game mammals and reptiles temporarily would be displaced due to the noise of the equipment and presence of humans and other construction activity. Various factors, including changes in food sources, shelter, population density, and dispersal effort, would determine the severity of impacts to all the wildlife and game birds. However, within the scope of the potential acres surrounding the Assessment Areas, the Proposed Action will have negligible effects on wildlife and game birds.

Migratory Birds, Raptors, Other Birds and Bats

Because natural perches are abundant at Bennett Mountain, with both deciduous and coniferous trees nearby, the use of towers and other structures for roosting can be expected to be reduced as birds will likely select natural cover and trees over open towers. However, use of the towers as perches and nesting structures still possible. The impacts from collisions still exist but can be reduced with a variety of design options that may be incorporated into construction. Based on literature review, the potential impacts to birds and bats from microwave radiation are still undetermined. Further research is needed on this subject to expand the limited body of literature available.

3.3.2.2.2 **Notch Butte**

At Notch Butte, the proposed action is expected to have little impact on big game species, which move widely throughout the area. Game birds, other game, and non-game mammals and reptiles temporarily would be displaced due to the noise of the equipment and presence of humans and other construction activity. Various factors, including changes in food sources, shelter, population density, and dispersal effort, would determine the severity of impacts to all the wildlife and game birds. However, within the scope of the potential acres surrounding the Assessment Areas, the Proposed Action will have negligible effects on wildlife and game birds.

Migratory Birds, Raptors, and Bats

At Notch Butte, there is a lack of natural perches; therefore, the use of towers may be more appealing as perching and nesting structures. The impacts from collisions also exist but can be reduced with a variety of options. Based on literature review, it is still undetermined what the impacts from microwave radiation are, if any, as they may be too low to have any effects. It has been determined that bats may have a natural aversion to towers, but more research also needs to be done on this subject (See Chapter 3.4). The Notch Butte site is also constructing powerlines, which will have additional impacts to bird and bat species.

3.3.2.3 Alternative C – Private Land Option, Bennett Mountain

Under this action alternative, all activities and environmental consequences at all locations would remain the same as Alternative B, even though the location of the communications facilities at Bennett Mountain would be located on private lands. Locating the Bennett Mountain site on private land would not change any of the activities or environmental consequences and would simply require permission for access. It would also eliminate removal of the BLM fire lookout. Impacts to wildlife, reptiles, migratory birds, raptors and bats would be the same as Alternative B.

3.3.3 Mitigation

3.3.3.1 Tower Collisions

A number of structural modifications can be done to mitigate for migratory bird, raptor and bat collisions. The Federal Aviation Administration (FAA) and Federal Communications Commission (FCC) on December 4, 2015, recognized the issue and recommend eliminating the use of non-flashing red lights, such as L-810 side-marker lights, and suggested that birds are much less attracted to flashing lights on towers, such as L-864 and L-865 lights. However, the best choice by many tower operators is the use of down-shielded, motion sensor-triggered security lighting, which promotes tower safety and reduces the possibility of attracting migratory birds (FCC, 2015). A number of other site selection and tower options are suggested in the following USFWS guidelines in the article on the website http://nctc.fws.gov/resources/knowledge-resources/bird-publications/tower-collisions.html.

3.3.3.2 Powerlines

Collisions

When siting a new line or replacing an existing line, planners shall consider the proximity of the line to high bird-use areas, vegetation that may attract birds, and topographical features that affect local and migratory movements. If a line is identified as having significant collision risk, remedial solutions shall be evaluated. The risk of collision may be reduced or eliminated by burying the line, relocating or reconfiguring the line, removing the overhead shield wire, or by marking the line to increase its visibility.

Electrocution

Retrofitting to prevent electrocutions can include the following:

1. Reframing (lowering the cross arm, changing to a 10-foot-wide arm, or adding a pole-top extension)
2. Covering jumper wires, conductors, and equipment
3. Discouraging perching in unsafe locations
4. Modifying ground wires (moving/removing grounds, adding a down-guy insulator)
5. Replacing a structure or equipment
6. Providing a perch above energized wires (recommended in combination with diverters)

Nesting

Nesting platforms have proven to be valuable tools (in terms of reducing outages, protecting nesting birds, and increasing positive publicity) in dealing with problem raptor nests on power poles. A nest should be relocated when birds are not present, preferably to a nesting platform at a non-energized pole, near the pole on which the nest was originally situated. The new nest platform should be as tall as, or taller than, the existing pole. In some cases, a new pole cannot be installed, so a nest platform is placed above the cross arm. Securing a nest above energized equipment is not encouraged because birds are likely to drop nesting materials that could cause a fire or outage. Nest discouragers may need to be installed on the original nest pole to prevent birds from rebuilding.

3.3.3.3 Cumulative Effects

Cumulatively, communication towers have a potentially significant impact on wildlife, especially migratory birds. All communication towers and antennas are subject to the environmental review procedures required by Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq*.) (ESA) and by the National Environmental Policy Act (83 Stat. 852; 42 U.S.C. 4321 *et seq*.) (NEPA). The U.S. Fish and Wildlife Service (USFWS) routinely reviews proposed communication projects and provides recommendations to project proponents to avoid adverse impacts to Federally listed endangered and threatened species, migratory birds, and other wildlife. The proposed microwave communication facilities at Bennett Mountain and Notch Butte would increase the total number of towers and associated buildings within preexisting tower locations. In addition to the proposed action, there is a potential for future communication facilities to be added to these locations, although none are currently proposed. However, adding additional towers to existing locations is likely more beneficial and less of an impact than developing entirely new tower location sites. Either option will have future cumulative effects to birds, specifically as described under Alternative B.

3.4 Special Status Species

Federal protection is afforded to those species listed or proposed as threatened or endangered by the USFWS under the ESA of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884). The USFWS website for Idaho identifies all listed, proposed, and candidate species for each county, as well as links to recent updates in respective species listing status and, where relevant, designation of Critical Habitat (USFWS 2015). The BLM, in accordance with national policy (BLM, 2008), routinely updates the Idaho BLM Special Status Species (SSS) List to assist in addressing conservation management needs and help establish management priorities. The BLM's national SSS policy (6840.04 sections D.4 and D.6) provides that State Directors are responsible for, "…ensuring that all actions comply with the ESA…including compliance with Section 7 consultations and conferences with the USFWS and National Marine Fisheries Service" (NMFS) and for "designation Bureau sensitive species within their respective jurisdictions, and at least once every five years, reviewing and updating the Bureau sensitive species list…". On BLM-administered lands, all offices are to "…manage Bureau sensitive species and their habitats to minimize or eliminate threats affecting the status of the species or to improve the condition of the species habitat" (6840.2.C). The BLM Manual 6840 further describes Bureau sensitive species as species that require special management consideration to avoid potential future listing under the ESA. BLM's Special Status Animal Categories include:

Type 1. Federally listed Threatened or Endangered Species, Experimental Essential populations and designated Critical Habitat.

Type 2. Idaho BLM Sensitive Species, including USFWS Proposed and Candidate species, ESA species delisted during the past 5 years, and ESA Experimental Non-essential populations.

Idaho BLM further geographically refines its SSS lists by BLM Administrative Units; in the case of the proposed action, the jurisdictional Administrative Units are the Four Rivers Field Office (Bennett Mountain) and the Shoshone Field Office (Notch Butte). Reclamation has evaluated the Assessment Areas for both Type 1 and Type 2 SSS using BLM's most recently updated available species list, and guidance from BLM specialists. Table 3-1 lists the Type 1 Species identified by USFWS as known or believed to occur in the counties (Elmore and Lincoln) in which the project sites are located, the species' listing status, and the impact determination.

Table 3-2 lists the Type 2 species identified by specialists in the jurisdictional BLM Field Offices as SSS likely to occur, or for which suitable habitat may exist, in or adjacent to either of the project sites in the Assessment Area. It also lists potential impacts assessed for each species and the impact determination reached for the Proposed Action and Alternatives. Assessments of expected impacts to each of the species listed, including mitigation measures, are discussed in greater detail in Sections 3.4.2.1 through 3.4.2.7 of this document.

Table 3-1. Endangered, threatened, candidate and proposed species, as defined by the ESA, for Elmore and Lincoln Counties, Idaho

Species	Elmore County (Bennett Mountain)	Lincoln County (Notch Butte)	Listing Status
Yellow-billed Cuckoo (*Coccyzus americanus*)	X	X	Threatened
Canada Lynx (*Lynx Canadensis*)	X		Threatened
Bull Trout (*Salvelinus confluentus*)	X		Bull Trout, Designated Critical Habitat
Bliss Rapids Snail (*Taylorconcha serpenticola*)	X		Threatened
Snake River Physa Snail (*Physella natricina*)	X		Endangered
Slickspot Peppergrass (*Lepidium papilliferum*)	X		Proposed
Whitebark Pine (*Pinus albicaulis*)	X		Candidate

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Table 3-2. BLM Special Status species with the potential to occur, or for which suitable habitat may exist in the Assessment Area, as identified by the BLM Shoshone and Four Rivers Field Offices

Species	Potential impacts assessed	Impact Determination – Alternative A	Impact Determination – Alternative B	Impact Determination – Alternative C
Greater sage-grouse *(Centrocercus urophasianus)*	Collision, habitat loss/fragmentation	Minor negative impact	Minor negative impact/temporary disturbance	Minor negative impact/temporary disturbance
Bald eagle (*Haliaeetus leucocephalus*)	Collision, electrocution	Minor negative impact	Minor negative impact	Minor negative impact
Golden eagle (*Aquila chrysaetos*)	Collision, electrocution	Minor negative impact	Minor negative impact	Minor negative impact
Swainson's hawk *(Buteo swainsoni)*	Collision, electrocution	Minor negative impact	Minor negative impact	Minor negative impact
Prairie falcon *(Falco mexicanus)*	Collision, electrocution	Minor negative impact	Minor negative impact	Minor negative impact
Western burrowing owl (*Athene cunicularia*)	Collision, Habitat loss/fragmentation	Minor negative impact	Minor negative impact/temporary disturbance	Minor negative impact/temporary disturbance
Short-eared owl (*Asio flammeus*)	Collision, Habitat loss/fragmentation	No negative impact	Temporary disturbance/no permanent impact	Temporary disturbance/no permanent impact
Long-billed curlew (*Numenius americanus*)	Collision, electrocution, habitat loss/fragmentation	No negative impact	Temporary disturbance/minor negative impact	Temporary disturbance/minor negative impact
Loggerhead shrike (*Lanius ludovicianus*)	Collision	No negative impact	No negative impact	No negative impact
Brewer's sparrow (*Spizella breweri*)	Collision, habitat loss/fragmentation	No negative impact	Temporary disturbance/no permanent impact	Temporary disturbance/no permanent impact
Sage sparrow (*Artemisiospiza nevadensis*)	Collision, habitat loss/fragmentation	No negative impact	Temporary disturbance/no permanent impact	Temporary disturbance/no permanent impact
Sage thrasher (*Oreoscoptes montanus*)	Collision, habitat loss/fragmentation	No negative impact	Temporary disturbance/no permanent impact	Temporary disturbance/no permanent impact
Gray wolf *(Canis lupis)*	Habitat loss/fragmentation	No negative impact	Temporary disturbance/no permanent impact	Temporary disturbance/no permanent impact
Pygmy rabbit (*Brachylagus idahoensis*)	Habitat loss/fragmentation	No negative impact	Temporary disturbance/no permanent impact	Temporary disturbance/no permanent impact
Little brown bat *(Myotis*	Collision, electromagnetic	Moderate/unquantified negative	Moderate/unquantified increased	Moderate/unquantified increased

Species	Potential impacts assessed	Impact Determination – Alternative A	Impact Determination – Alternative B	Impact Determination – Alternative C
lucifugus)	(thermal) radiation	impact	negative impact	negative impact
Western small-footed bat *(Myotis ciliolabrum)*	Collision, electromagnetic (thermal) radiation	Moderate/unquantified negative impact	Moderate/unquantified increased negative impact	Moderate/unquantified increased negative impact
Yuma myotis *(Myotis yumanensis)*	Collision, electromagnetic (thermal) radiation	Moderate/unquantified negative impact	Moderate/unquantified increased negative impact	Moderate/unquantified increased negative impact
Canyon bat *(Parastrellus Hesperus)*	Collision, electromagnetic (thermal) radiation	Moderate/unquantified negative impact	Moderate/unquantified increased negative impact	Moderate/unquantified increased negative impact
Townsend's big-eared bat *(Corynorhinus townsendii)*	Collision, electromagnetic (thermal) radiation	Moderate/unquantified negative impact	Moderate/unquantified increased negative impact	Moderate/unquantified increased negative impact

3.4.1 Affected Environment

On-site physical investigations and comprehensive site evaluations were conducted May 21, 2015, at both the Bennett Mountain and Notch Butte project sites within the Assessment Area. The sites were assessed for Type 1 and Type 2 SSS by two Reclamation biologists with experience conducting terrestrial site clearances. The evaluation of the Notch Butte site was conducted for the Notch Butte Assessment Area, but also included consideration of some adjacent lands (pictured in Section 3.4.1.3).

Both the USFWS and the BLM Type 1 Special Status Species Category lists for the Assessment Area include the Federally threatened yellow-billed cuckoo, indicated to be present within the Idaho counties (Elmore and Lincoln) in which both project sites included in the Assessment Area are located. The Type 1 ESA list for occurrence in Elmore County (where the Bennett Mountain site is located) also includes bull trout, Bliss Rapids snail, Snake River physa snail, slickspot peppergrass, and whitepark pine; however, in the examination for spatial refinement of these species' ranges, none of these species were identified by BLM specialists as existing within or near the Assessment Area at either the Bennett Mountain or Notch Butte project sites, and therefore they were not further evaluated.

Type 2 SSS evaluated in this EA were identified by specialists in the jurisdictional BLM Field Offices as SSS likely to occur (including migration through the area), or for which suitable habitat may exist, in or adjacent to the Assessment Areas. These species were assessed either individually (greater sage-grouse and long-billed curlew), or within an evaluation grouping (Falconiformes, Strigiformes, Passeriformes, Chiroptera (bats), and terrestrial mammals), as appropriate. No Type 2 SSS fish, amphibians, reptiles, invertebrates, or plants were identified as present within the Assessment Areas, so these categories were not assessed.

3.4.1.1 Bennett Mountain

The proposed microwave communication facility location is currently occupied by two buildings, multiple concrete pads, an above-ground propane tank, a sub-surface water tank, and multiple small miscellaneous man-made features and structures (Photograph 3-1, Photograph 3-2, and Photograph 3-3).

Photograph 3-1. Photo (taken facing south) of the proposed microwave communication facility location; this photo encompasses nearly the entire construction area.

Photograph 3-2. Photo (taken facing Southeast) of the proposed microwave communication location

Photograph 3-3. Photo (taken facing north) of the proposed microwave communication facility location; towers in the background will remain unchanged and are not part of this project

The proposed location of the microwave communication facility is on the summit of Bennett Mountain. This location is predominantly rock and gravel surfaces at the summit, largely due to prior mechanical site manipulation to support existing communications facility installation, operation and maintenance. Patchy and discontinuous sagebrush was found to occur within the Assessment Area. The habitat adjacent to the Assessment Area was largely a mosaic of conifers, deciduous shrub, sagebrush, various grasses, and rock features (Photograph 3-4, Photograph 3-5, Photograph 3-6, and Photograph 3-7).

Photograph 3-4. Photo (taken facing east) from within the proposed microwave communication facility location

Photograph 3-5. Photo (taken facing south) taken from within the proposed microwave communication facility location

Photograph 3-6. Photo (taken facing west) taken from the western edge of the proposed microwave communication facility location

Photograph 3-7. Photo (taken facing north) taken from near the northeastern corner of the proposed microwave communication facility location

3.4.1.2 Notch Butte

The Assessment Area has been heavily impacted by wildfire, invasive vegetation, and livestock grazing activities. Additionally, the Assessment Area is adjacent to U.S. Highway 93 and is within 3 miles of a dairy facility and associated agricultural lands. As previously discussed, the current access road to the proposed site will require improvements, and the power lines will require replacement to accommodate the new equipment. Impacts associated with road improvement, power pole replacement and installation of the microwave communications equipment are anticipated to be minor and local in nature. Overall impacts from the proposed action to the existing communications site will be negligible due to the current already-developed condition of the site. Although the Assessment Area is located within an area designated as a General Habitat Management Area (GHMA), based on the site visit and definitions of suitable sage-grouse habitat, no suitable greater-sage grouse habitat was identified within the Assessment Area.

3.4.2 Species Impact Assessments

3.4.2.1 Galliformes (greater sage-grouse)

The greater sage-grouse was the only species included in this assessment category. Potential impacts to these species evaluated include collision with power lines and tower structures, and habitat loss/fragmentation.

Collision

Galliformes as an order are considered to have a low to medium susceptibility to collision with powerlines and tower structures (APLIC 2012). Susceptibility is linked to a bird's body size, weight, and maneuverability (i.e., wing loading ratio), as well as elements of its flight behavior (e.g., flocking, altitude patterns). Under all three Alternatives, potential impacts to sage-grouse due to collision risks would be expected to remain consistent with current conditions, and are classified as minor.

Habitat loss/fragmentation

Although anthropogenic structures are commonly referenced in literature as having a potentially negative impact on sage-grouse, limited research has been carried out on the relationship between impact and specific structure types (e.g., communications towers, transmission lines, etc.), the influence of topography, habitat conditions, associated infrastructure (i.e., buildings, parking pads, etc.), and related operations and maintenance activities on sage-grouse population dynamics. In general, investigations indicate sage-grouse occurrence is positively correlated with increasing distance from anthropogenic structures on the landscape.

Anthropogenic features such as tall towers and associated structures (transmission lines, buildings, and access roads), when added to largely treeless sagebrush steppes where sage-grouse evolved, are believed to cause avoidance, and as such, may displace birds from traditional use sites (USFWS 2010, UWIN 2010). The general basis for statements regarding sage-grouse avoidance of tall structures in open habitats originates from hypotheses that these structures constitute novel elements in the environment, where bird species are not habituated to their presence (Braun 1998). Wildlife avoidance of anthropogenic activities or features has been defined as a lower density of animals than expected based on habitat availability in zones near the source of the impact (Vistnesi and Nelleman, 2001). However, avoidance behavior may manifest itself as not an overall reduction in density, but rather a spatial redistribution of occupancy densities, i.e., lower densities near, and higher densities farther away from, the source of the impact than would be expected based on habitat availability alone.

Many communication sites exist in southern Idaho on various isolated buttes and mountains. The existing facilities may represent an ongoing, diffuse negative impact to sage grouse due to habitat fragmentation and collision risk. However, because of the limited size of the Action Areas (less than 1 acre) in all three Alternatives considered within the larger context of the surrounding landscapes, the negative impact associated with habitat fragmentation can be classified as minor.

The construction activities included in Alternatives B and C may result in temporary impacts to the species. These impacts would be expected to include behavioral modifications such as temporary avoidance or abandonment of areas adjacent to the Action Area due to disturbance and increased human presence during construction activities. However, because all

construction and support activities for both Alternatives B and C are planned to occur within previously disturbed sites that are already currently occupied by physical, man-made structures and new surface disturbance will be minimal, neither of these Alternatives would result in any additional permanent habitat loss or fragmentation beyond what is already experienced under current conditions. As the increased impacts during construction would be temporary in nature, and in consideration of the limited size of the Action Areas (less than 1 acre) in both Alternatives B and C within the larger context of the surrounding landscapes, this potential temporary spatial displacement is not expected to represent an overall adverse effect to the species.

3.4.2.1.1 **National Greater Sage-Grouse Conservation Strategy**

In an effort to respond to the decline of the population of the greater sage-grouse, linked to declining health of the sagebrush landscapes of the American West, the BLM and USFS have approved Resource Management Plan Amendments (RMPAs) for the Great Basin Region Greater Sage-Grouse Sub-regions (Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah). Based on the best available science and incorporating extensive participation from other agency partners, private stakeholders, and the general public, these documents serve as the cornerstone of a broad, landscape-level National Greater Sage-Grouse Conservation Strategy.

The BLM-USFS plans provide a three-tiered habitat management approach that focuses protections on the areas of highest importance to the species:

1. **Priority Habitat Management Areas (PHMA)**, equivalent to Core Areas, are managed to avoid and minimize further disturbance. Surface energy and mineral development is limited in these areas. Development is capped with limits on the amount and density of disturbance allowed. All of the SFAs are incorporated within PHMA.
2. **Important Habitat Management Areas (IHMA)** have moderate-to-high conservation value for greater sage-grouse populations. While IHMA is managed less conservatively than PHMA, more protection allocations may be instituted through the adaptive management strategy.
3. **General Habitat Management Areas (GHMA)** provide greater flexibility for land use activities. Mitigation and required design features ensure that impacts from development are avoided, minimized and mitigated in GHMA.

All three management plan levels incorporate three common approaches:

- Minimizing new or additional surface disturbance
- Improving habitat condition.
- Reducing threat of rangeland fire

In conformance with these policies, Reclamation will use the best available science, together with onsite surveys, to identify potential sage-grouse habitat within the specific Assessment Area. Because both the Bennett Mountain and Notch Butte sites are located in areas designated as GHMA by the BLM for sage-grouse management purposes, mitigation measures and design features will be identified to reduce any impacts associated with the proposed action and in conformance with the identified habitat management level listed above. Figure 3-1 shows the Greater Sage-Grouse Habitat Management Area designations identified by the BLM workgroup for Idaho and SW Montana.

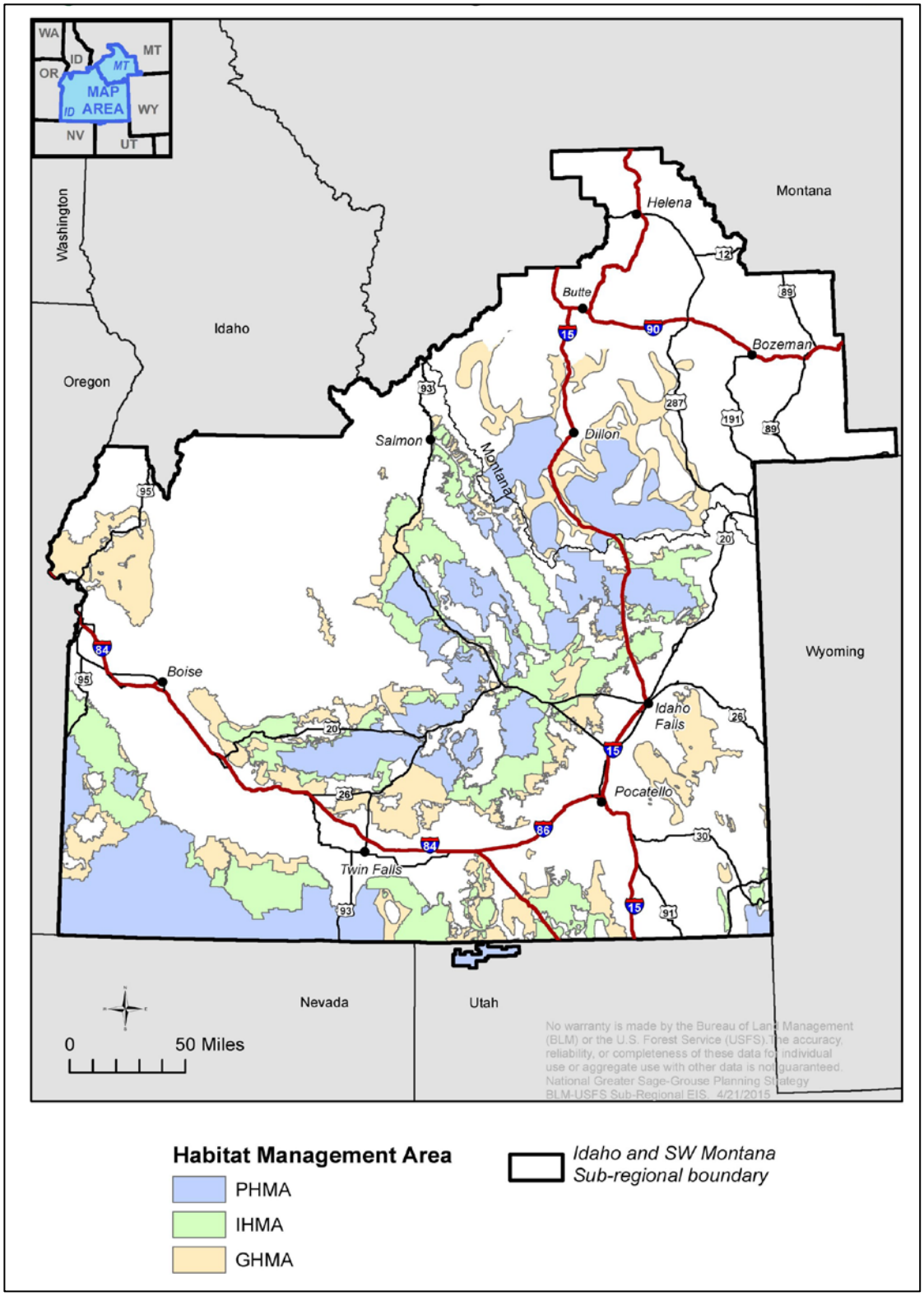

Figure 3-1. Map of Greater Sage-Grouse Habitat Management Area designations identified by the BLM workgroup for Idaho and SW Montana

3.4.2.1.2 **Disturbance Cap Analysis**

As part of the landscape-level National Greater Sage-Grouse Conservation Strategy, the BLM-USFS RMPAs for the Great Basin Region (including Idaho) calls for the incorporation of a cap on discrete anthropogenic disturbances, such that they cover no more than 3 percent of the total sage-grouse habitat present, regardless of ownership. This requirement applies to PMHA-designated greater sage-grouse habitat (Sage-grouse National Technical Team 2011).

The Notch Butte and Bennett Mountain Action Areas included in all three Alternatives considered in this document are in locations classified as GHMA, a lower-priority management designation that allows for greater flexibility for land use activities, and are therefore exempt from the formal disturbance cap analysis requirement. However, mitigation and required design features will be incorporated in Alternatives B and C to ensure that undue impacts to sage-grouse populations and habitat are avoided, minimized and mitigated, as required for GHMA.

3.4.2.2 Falconiformes (Raptors)

The bald eagle, golden eagle, Swainson's hawk, and prairie falcon were included in this assessment category. Potential impacts to these species evaluated include collision with power lines and tower structures, and electrocution.

Falconiformes as an order are considered to have a medium susceptibility to collision with powerlines and tower structures (APLIC 2012). Susceptibility is linked to a bird's body size, weight, and maneuverability (i.e., wing loading ratio), as well as elements of its flight behavior (e.g., flocking, altitude patterns). While falconiformes are agile fliers and possess sharp eyesight, aerial hunting behavior near structures or powerlines has been linked to collision risk, raising this order's susceptibility (APLIC 2012). Under all three Alternatives, potential impacts to falconiformes due to collision risks would be expected to remain consistent with current conditions, and are classified as minor.

Powerline electrocution risks to birds are related to wingspan and perching and nesting behaviors. Due to their large size and behavioral tendency to use power poles as perching or nesting places, falconiformes are at a higher risk of electrocution than most other bird orders. Adherence to current power structure guidelines intended to reduce electrocution risks to birds (raptor-safe standards specified in the Avian Power Line Interactive Committee (APLIC) 2006 Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Idaho Power Company's Avian Protection Policy (Idaho Power Company 2015) and implementation of other mitigation measures as outlined in section 3.3.2.2 (e.g., nest platforms, relocations, or nesting deterrence measures) of this document will lower this risk to falconiformes to a negligible level under all three Alternatives.

3.4.2.3 Strigiformes (Owls)

The western burrowing owl and short-eared owl were included in this assessment category. Potential impacts to these species evaluated include collision with power lines and tower structures, electrocution, and habitat loss/fragmentation.

Collision

Strigiformes as an order are considered to have a very low susceptibility to collision with powerlines and tower structures (APLIC 2012), due to biological characteristics (e.g., sharp vision and high agility) and elements of their flight behaviors (e.g., low-altitude flight patterns). Under all three Alternatives, potential impacts to strigiformes due to collision risks would be expected to remain consistent with current conditions, and are classified as negligible.

Electrocution

Powerline electrocution risks to birds are related to wingspan and perching and nesting behaviors. Due to the short-eared owl's larger size, it may be at a medium risk of electrocution; the risk of electrocution to the western burrowing owl is negligible, due to its smaller size. Adherence to current power structure guidelines intended to reduce electrocution risks to birds and implementation of other mitigation measures as outlined in Section 3.3.2.2 (e.g., nest platforms, relocations, or nesting deterrence measures) of this document will lower this risk to strigiformes to a negligible level under all three Alternatives.

Habitat loss/fragmentation

Because they are ground-nesters dependent upon the presence of a rodent population and their attendant burrows for both prey and nesting locations (in the case of the western burrowing owl), the short-eared owl and western burrowing owl may face the risk of negative impacts due to habitat loss/fragmentation.

Under Alternative A – No Action, potential impacts to these species would be expected to remain consistent with current conditions.

Because the sites included in the Action Area for Alternative B – Proposed Action and Alternative C – Private Land Option are currently already occupied by physical, man-made structures, the short-eared owl and western burrowing owl do not currently nest within the Action Area. However, they may utilize habitat adjacent to the Action Area, and thus could be impacted indirectly by Alternative B or C. These impacts include behavioral modifications such as temporary avoidance or abandonment of areas adjacent to the Action Area due to disturbance and increased human presence during construction activities. However, because all construction and support activities for Alternatives B and C are planned to occur within previously disturbed sites that are already currently occupied by physical, man-made structures and new surface disturbance will be minimal, neither of these Alternatives would result in any additional permanent habitat loss or fragmentation beyond what is already experienced under current conditions. As the above impacts on the species would be expected

to be temporary in nature, and in consideration of the limited size of the Action Areas (less than 1 acre) in Alternatives B and C within the larger context of the surrounding landscapes, this potential temporary spatial displacement is not expected to represent an overall adverse effect to these species.

3.4.2.4 Charadriformes (Long-billed curlew)

The long-billed curlew is the only species included in this assessment category. Potential impacts to these species evaluated include collision with power lines and tower structures, electrocution, and habitat loss/fragmentation.

Collision

Charadriformes as an order are considered to have a low to medium susceptibility to collision with powerlines and tower structures (APLIC 2012). Susceptibility is linked to a bird's body size, weight, and maneuverability (i.e., wing-loading ratio), as well as elements of its flight behavior (e.g., flocking, altitude patterns). Under all three Alternatives, potential impacts to long-billed curlew due to collision risks would be expected to remain consistent with current conditions, and are classified as minor.

Electrocution

Powerline electrocution risks to birds are related to wingspan and perching and nesting behaviors. The long-billed curlew's larger size alone may put it at a medium risk of electrocution; however, this risk is effectively mitigated by the long-billed curlew's life history traits, which do not include power pole perching or nesting behavior. Adherence to current power structure guidelines intended to reduce electrocution risks to birds and implementation of other mitigation measures as outlined in Section 3.3.2.2 (e.g., nest platforms, relocations, or nesting deterrence measures) of this document will lower this risk to long-billed curlews to a negligible level under all three Alternatives.

Habitat loss/fragmentation

The long-billed curlew is a coastal shorebird that nests in the shortgrass and mixed-grass prairies and agricultural fields of the Great Plains and Great Basin. Because it is a ground-nesting species, the long-billed curlew may face the risk of negative impacts due to habitat loss/fragmentation.

Under Alternative A – No Action, potential impacts to these species would be expected to remain consistent with current conditions.

Because the sites included in the Action Area for Alternative B – Proposed Action and Alternative C – Private Land Option are currently already occupied by physical, man-made structures, the long-billed curlew does not currently nest within the Action Area. However, it may utilize habitat adjacent to the Action Area, and thus could be impacted indirectly by Alternative B or C. These impacts would be expected to include behavioral modifications such as temporary avoidance or abandonment of areas adjacent to the Action Area due to

disturbance and increased human presence during construction activities. However, because all construction and support activities for Alternatives B and C are planned to occur within previously disturbed sites that are already currently occupied by physical, man-made structures and new surface disturbance will be minimal, neither of these Alternatives would result in any additional permanent habitat loss or fragmentation beyond what is already experienced under current conditions.

It is notable that this temporary negative impact could be heightened for this species, because it is a migratory species and construction activities would take place in the summer season, which could coincide with the long-billed curlew's breeding season. However, as the above impacts on the species would be expected to be temporary in nature (affecting only one breeding season), and in consideration of the limited size of the Action Areas (less than 1 acre) in both Alternatives B and C within the larger context of the surrounding landscapes, this potential temporary spatial displacement is expected to represent an overall minor adverse effect to this species.

3.4.2.5 Passeriformes (Song birds)

The loggerhead shrike, Brewer's sparrow, sage sparrow, and sage thrasher are included in this assessment category. Potential impacts to these species evaluated include collision with power lines and tower structures and habitat loss/fragmentation.

Collision

Passeriformes as an order are considered to have the lowest susceptibility to collision with powerlines and tower structures (APLIC 2012), due to biological characteristics (e.g., smaller body size and high agility) and elements of their flight behaviors (e.g., low-altitude flight patterns). Under all three Alternatives, potential impacts to Passeriformes due to collision risks would be expected to remain consistent with current conditions, and are classified as negligible.

Habitat loss/fragmentation

Because several of these species are sagebrush shrub-dwellers, they may face the risk of negative impacts due to habitat loss/fragmentation. However, the loggerhead shrike may actually benefit from all three Alternatives, as it is known to hunt from tall structures in the open landscape such as fence posts and utility poles.

Under Alternative A – No Action, potential impacts to all these species would be expected to remain consistent with current conditions.

Because the sites included in the Action Area for Alternative B – Proposed Action and Alternative C – Private Land Option are currently already occupied by physical, man-made structures, it is unlikely that these species currently nest within the Action Area. However, they and other Passeriformes may utilize habitat adjacent to the Action Area, and thus could be impacted indirectly by Alternative B or C. These impacts would be expected to include

behavioral modifications such as temporary avoidance or abandonment of areas adjacent to the Action Area due to disturbance and increased human presence during construction activities. However, because all construction and support activities for Alternatives B and C are planned to occur within previously disturbed sites that are already currently occupied by physical, man-made structures and new surface disturbance will be minimal, neither of these Alternatives would result in any additional permanent habitat loss or fragmentation beyond what is already experienced under current conditions. As the above negative impacts on the species would be expected to be temporary in nature, and in consideration of the limited size of the Action Areas (less than 1 acre) in Alternatives B and C within the larger context of the surrounding landscapes, this potential temporary spatial displacement is not expected to represent an overall adverse effect to these species.

3.4.2.6 Chiroptera (Bats)

The western small-footed bat, Yuma myotis, canyon bat, and Townshend's big-eared bat are included in this assessment category. Potential impacts to these species evaluated include collision with power lines and tower structures and electromagnetic (thermal) radiation.

Collision

While bats' susceptibility to collision with moving wind turbines is a known impact that has been studied, bats' susceptibility to collision with static objects such as powerlines and tower structures is low (Nicholls and Racey 2009). Under all three Alternatives, potential impacts to bats due to collision risks would be expected to remain consistent with current conditions, and are classified as negligible.

Electromagnetic (Thermal) Radiation

The aversive relationship between bats and microwave electromagnetic radiation has been documented in several studies (Balmori 2009, Nicholls and Racey 2009, Hunter 2012). However, current scientific understanding of the response of bats to electromagnetic radiation is incomplete. Relatedly, developing practices to mitigate effects to bats, such as identification of an optimum signal capable of deterring bats, will require expanded study.

Microwaves have been shown to reduce bat foraging activity within a given area, an effect that is not yet fully understood, but which cannot be attributed to any corresponding reduction in insect abundance (Nicholls and Racey 2009). A similar study on this deterrent effect of microwaves examined bat behavior along an electromagnetic gradient, identifying high levels of positive correlation between reductions in foraging behavior and proximity to the source of electromagnetic disturbance (Hunter 2012). Further study is needed in order to refine understanding of how various parameters such as the signal dimensionality/direction, frequency, wavelength, pulse repetition rate, target size and power output of the signal contribute to this aversive effect. Observations of captive bats have noted an aversion to even a moderate infra-red heat source (Reeder and Cowles 1951). Therefore, it is possible that thermal induction, resulting from electromagnetic exposure in the vicinity of radar

installations, may produce an inhospitable thermal environment for foraging bats, which could result in symptoms ranging from discomfort to hyperthermia, depending on the strength and duration of exposure.

Under Alternative A – No Action, potential impacts to these species would be expected to remain consistent with current conditions.

Under Alternatives B and C, the installation and operation of additional microwave dishes may result in additional impact to bats. Although it is not possible from current research to quantify this impact in terms of outlining a discrete geographic area of impact, it can reasonably be expected that the operation of additional microwave dishes in the Assessment Areas will result in a less suitable environment for bats in the Assessment Area, and may extend the current area of unsuitability to a greater range than exists under current microwave operations. However, this presumed range extension would be finite, and would not represent a significant area of displacement, in relation to the greater surrounding landscape. Therefore, the potential increased negative impacts to Chiroptera of Alternatives B and C are classified as moderate/unquantified.

3.4.2.7 Terrestrial mammals

The pygmy rabbit and gray wolf are included in this assessment category. Potential impacts to these species evaluated are limited to habitat loss/fragmentation.

Habitat loss/fragmentation

Under Alternative A – No Action, potential impacts to these species would be expected to remain consistent with current conditions.

Because the sites included in the Action Area for Alternative B – Proposed Action and Alternative C – Private Land Option are currently already occupied by physical, man-made structures, neither of these species is expected to occur within the Action Area. However, they may utilize habitat adjacent to the Action Area, and thus could be impacted indirectly by Alternative B or C. These impacts include behavioral modifications such as temporary avoidance or abandonment of areas adjacent to the Action Area due to disturbance and increased human presence during construction activities. However, because all construction and support activities for both Alternatives B and C are planned to occur within previously disturbed sites that are already currently occupied by physical, man-made structures and new surface disturbance will be minimal, neither of these Alternatives would result in any additional permanent habitat loss or fragmentation beyond what is already experienced under current conditions. As the above negative impacts on these species would be expected to be temporary in nature, and in consideration of the limited size of the Action Areas (less than 1 acre) in Alternatives B and C within the larger context of the surrounding landscapes, this potential temporary spatial displacement is not expected to represent an overall adverse effect to these species.

3.4.3 Environmental Consequences

3.4.3.1 Alternative A – No Action

Under the No Action alternative, Reclamation would not install any communications equipment at each of the five locations and road and transmission line improvements would not occur at the Notch Butte site. Each existing communication facility would persist into the future in its current state, and would be subject to routine operation and maintenance activities. Potential impacts to all Type 2 SSS would remain consistent with current conditions.

The landscape surrounding the Bennett Mountain site landscape possesses features that facilitate the continued existence of sage-grouse. Thus, the long-term operation and maintenance of the existing communications facilities at this site could be expected to perpetuate some unquantified level of negative impact to sage-grouse. Although sage-grouse habitat or attributes consistent with sage-grouse occupation are not present within the Action Area, it is possible that the presence of the structures and human activity associated with current communication facility operations and maintenance (including the access road) may result in avoidance behavior, subsequently impacting potential habitat connectivity in the overall Bennett Mountain area.

3.4.3.2 Alternative B – Proposed Action

3.4.3.2.1 **Bennett Mountain**

Numerous buildings, tanks, towers, and other structures not related to Reclamation's project are also located within the Assessment Area. Due to the developed nature of the Bennett Mountain Assessment Area and the nature of these facilities surrounding the proposed microwave communication facility location, it is unlikely that any SSS utilize habitat within the Assessment Area and would experience direct impacts from this Action. Effects to SSS due to impact of areas adjacent to the Action Area are summarized in Table 3-2 and discussed in detail in Sections 3.4.2.1-3.4.2.7 of this document. Although the Bennett Mountain location is mapped as nesting habitat, it is actually woodland and is not the type of habitat used by sage-grouse. Therefore no impact to sage-grouse would occur at this location.

3.4.3.2.2 **Notch Butte**

Due to the developed nature of the Notch Butte Assessment Area and the nature of the facilities surrounding the proposed microwave communication facility location, it is highly unlikely that any Type-2 SSS, including the greater-sage grouse, occupies habitat within the Assessment Area. The on-site investigation did not document sage-grouse or signs associated with the species. The Assessment Area and surrounding landscape has been heavily altered by wildfire and agricultural activities (Photograph 3-8 and Photograph 3-9). With the exception of a few isolated plants, no sagebrush was observed within or adjacent to the Assessment Area. The Assessment Area and surrounding landscape are dominated by

cheatgrass, crested wheatgrass, and agricultural fields and does not possess the characteristics associated with sage-grouse occupation. The apparent lack of suitable habitat, in conjunction with current land-management practices, precludes potential impacts to sage-grouse or their habitats as a result of the proposed microwave communication facility installation, operation, and maintenance. Although the area already has communication towers at this location it is anticipated that the installation of the additional communications equipment, upgrading the access road, and upgrading the existing power lines will continue to have an ongoing impact to greater-sage grouse habitat within or adjacent to the assessment area. Implementation of Alternative B is expected to result in a minor impact to SSS associated with long-term operations and maintenance of the facilities, as summarized in Table 3-2 and discussed in detail in Sections 3.4.2.1-3.4.2.7 of this document. In order to offset the impact associated with additional anthropogenic disturbance in general habitat for the greater sage grouse, Reclamation would be required to implement a forbe planting as described in Section 2.3.2.2 of this document. This offsite mitigation would be intended to result in a net overall benefit for sage-grouse.

Photograph 3-8. Photo (taken facing east) taken from the southern edge of the proposed microwave communication facility location

Photograph 3-9. Photo (taken facing east) taken from the eastern edge of Notch Butte communication facility

3.4.3.2.3 Reclamation Office Facilities

Each office is located within a municipality (Heyburn, ID, and Boise, ID) and is characterized by typical municipal features. No suitable habitat for the Type-2 SSS exists within or near each office. The installation of communication equipment is not anticipated to have any impacts on species or their habitat.

3.4.3.3 Alternative C – Private Land Option, Bennett Mountain

Impacts to SSS as a result of implementation of Alternative C are expected to be the same as impacts associated with Alternative B implementation. Private land is located within the existing communications site on Bennett Mountain. The placement of the communications equipment within the existing site, on private land, will result in the same largely indirect level of anticipated impact to SSS as implementation of Alternative B (see Table 3-2 and detailed discussion in Sections 3.4.2.1-3.4.2.7 of this document).

3.4.3.4 Cumulative Effects

Greater-sage grouse habitat loss, habitat quality reduction, and fragmentation are of great concern to land management agencies. Although construction and development projects may have little or no impacts to the species on an individual level, when analyzed collectively,

measureable impacts may be detectable. The cumulative nature of development projects warrants a thorough evaluation of individual projects for collective impacts when analyzed in conjunction with existing activities, as well as projects expected to occur within the reasonably foreseeable future. All activities associated with the action alternatives will occur within or immediately adjacent to existing constructed facilities. Routine operation and maintenance associated with these locations is not expected to change significantly with installation of the new communications equipment at each location and Notch Butte road improvement. While impact to bats may increase in the immediate vicinity of the upgraded facilities under Alternatives B and C (as discussed in Section 3.4.2.6), in the greater context of the landscape, local SSS population redistributions on this small scale are not considered extensive enough to represent a cumulative effect of this project.

3.5 Recreation

3.5.1 Affected Environment

3.5.1.1 Bennett Mountain

BLM manages public lands in the Bennett Mountain area in cooperation with the Idaho Department of Lands. While some dispersed camping and hunting occurs, no developed facilities exist for these activities in the immediate area. While the Bennett Mountains lie within a BLM Special Recreation Management Area (SRMA), as described in BLM's 2001 Fire Lookout and Radio Relocation EA (BLM 2001), the proposed microwave communication facility location lacks legal public access.

3.5.1.2 Notch Butte

Notch Butte is located on a fairly large block of open BLM public lands without developed recreation facilities. Dispersed recreation in the area includes primarily OHV use, fishing, and hunting. While individual communication facilities are fenced on the butte, the public may use the butte's elevated viewpoint for a variety of recreation uses, including, but not limited to, spotting wildlife and astronomical observations.

3.5.1.3 Reclamation Office Facilities

Reclamation office facilities are not used for recreation and are not considered in this analysis.

3.5.2 Environmental Consequences

3.5.2.1 Alternative A – No Action

There would be no short- or long-term recreation impacts in the immediate area around the existing communication facilities. Impacts to recreation usage as a result of repair and

mitigation actions at recreation sites associated with Reclamation reservoirs in other areas could occur as a result of Reclamation's aging communications infrastructure.

3.5.2.2 Alternative B - Proposed Action

Impacts to recreation in the vicinity of the proposed microwave communication facilities would be limited to occasional traffic disruptions during component transportation and delivery. These would be short-term (less than 1 year) in nature and would end once installation is complete. No long-term impacts would be expected because the area would be fenced and have restricted access. Installation of an additional communication facility at this location would not impact recreation opportunities in the SRMA.

3.5.2.3 Alternative C – Private Land Option, Bennett Mountain

Impacts to recreation would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternatives B and C, the impacts would not differ.

Impacts to recreation at Notch Butte would be the same as those described in Alternative B.

3.5.2.4 Cumulative Effects

Due to lack of impacts, no cumulative effects are anticipated on this resource as a result of the proposed project.

3.6 Visual Resources

3.6.1 Affected Environment

BLM's Visual Resource Management (VRM) system is used to inventory scenic values and establish management objectives for those values through the resource management planning process. Proposed activities are evaluated to determine whether they conform to the corresponding visual resource management objectives.

3.6.1.1 Bennett Mountain

The proposed microwave communication facility location is within a VRM Class II area, as established in the Jarbidge Resource Management Plan (BLM 1987). 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. Changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

The existing BLM fire lookout and communications facilities are situated just below the skyline to reduce the visual impacts of the site from key observation points in the surrounding viewshed, as described in BLM's 2001 Fire Lookout and Radio Relocation EA (BLM 2001).

3.6.1.2 Notch Butte

The proposed microwave communication facility location is within a VRM Class III area, as established in the Monument RMP (BLM 1986). 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 numerous existing communication facilities on Notch Butte have been constructed to minimize visual impacts using environmental coloration and non-reflective surfaces in conformance with BLM policy and VRM practices. Despite these efforts, the existing communications facilities on Notch Butte are visible from a considerable distance because of the elevation of the butte above slightly rolling topography.

3.6.1.3 Reclamation Office Facilities

The Reclamation office locations are not located within a BLM VRM inventory area. The office buildings in Boise already have various structures on their roofs, so some visual impact already exists above the roof line of the buildings. The existing structures are not readily visible to casual observers adjacent to the buildings, but are visible from greater distances. Their irregular rooflines as seen from a distance are an integral part of the cityscape.

The office building in Heyburn is in a light industrial area with a few other buildings and agricultural fields. New development adjacent to the office building is creating a more urban landscape.

3.6.2 Environmental Consequences

3.6.2.1 Alternative A – No Action

There would be no short- or long-term visual impacts in the immediate area around the existing communication facilities and office buildings.

3.6.2.2 Alternative B – Proposed Action

Visual impacts would be likely to attract the attention of the casual observer at Notch Butte and the three Reclamation offices as a result of the installation of the proposed microwave communication facility and equipment, particularly in the foreground/middle-ground zone. At Bennett Mountain, Reclamation's 100-foot galvanized steel tower would support five microwave dishes, from 6 to 10 feet in diameter. The galvanized finish of the tower, which would become increasingly non-reflective with oxidation over time, the flat grey coloration of

the microwave dishes, the environmental color of the equipment buildings, and locating the facility below the ridgeline would all contribute to the reduction of contrast between the man-made and natural features of the area as viewed from key observation points, thereby keeping visual impacts within BLM prescribed parameters.

At Notch Butte, the same impacts would occur in relation to the tower and dishes, except that there would only be four 10-foot dishes. The proposed microwave communication facility would comply with BLM's VRM objectives, but would require an amendment to BLM's Notch Butte Communications Site Management Plan to allow Reclamation's required 10-foot-diameter microwave dishes at this location. Thus, while Reclamation's facility would be appropriate for the designated VRM class, the facility would be noticeable from a greater distance than the existing facilities because the microwave dishes would be larger. Highway 93/75 is only 0.6 mile away, so there is no way to hide, blend in, or disguise the communication facilities from the view from key observation points.

The microwave dishes would be installed on the rooftops of two of the office buildings, away from the edges, on tripods. In these locations, the dishes would not be visible from the ground in the immediate area around the buildings. The dishes would most likely be visible from key observation points at greater distances from the office buildings, but since other structures already exist atop the buildings, and the dishes would not be mounted on towers, the dishes would not attract the attention of the casual observer to a greater degree than already occurs. Much of the impact would be mitigated by existing trees that provide visual screening from many key observation points.

The 80- to 100-foot tower at the Upper Snake Field Office would be visible from many key observation points, including from the ground adjacent to the building. The tower would have visual resource impacts because it would be significantly taller and more angular than other adjacent structures, and it would have a dish on it that would be visible from a considerable distance.

New development is occurring nearby, so visual impacts created by the microwave tower would likely diminish in the future as the skyline becomes more complex.

3.6.2.3 Alternative C – Private Land Option, Bennett Mountain

Visual Impacts would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternatives B and C, the impacts would not differ.

Visual Impacts at Notch Butte would be the same as those described in Alternative B.

3.6.2.4 Cumulative Impacts

Cumulative visual resource impacts at Bennett Mountain would be adequately mitigated by standard visual resource management techniques.

Reclamation's proposed microwave communication facility at Notch Butte, with a larger-diameter dish than other existing communications equipment at the site, would have acceptable visual impacts that are within the VRM Class III objectives.

The installation of communication equipment on top of two of the Reclamation offices would not have significant cumulative impacts to visual resources because of existing visual impacts at these locations.

The cumulative impacts of installation of a communication tower at the USFO would have noticeable visual resource impacts because it would be significantly taller and more angular than other adjacent structures, and because of the size of the microwave dish mounted on it.

3.7 Cultural Resources

3.7.1 Affected Environment

The term *cultural resources* refers to the traces of human activity left behind from the people of the past, represented by the disciplines of archaeology and architectural history and the existing traditional activities, places and practices of ethnically and culturally diverse groups (traditional cultural properties and sacred sites). Buildings, sites, features, artifacts, structures, and landscapes with ascribed cultural value, either scientific or traditional, represent some of the many forms for this non-renewable resource.

In southern Idaho and through much of the Intermountain West, evidence of past human activity dates to at least 12,000 years Before Present (BP), and likely dates to approximately 14,000 BP (Gibbon and Ames 1998). Evidence of the earliest inhabitants of the region is scarce, and archaeologists tend to believe that groups were highly nomadic and focused primarily on hunting big game (Roll and Hackenberger 1998).

Over time, as the climate and environment gradually changed around them to warmer and drier conditions, people adapted through increasing complexity in subsistence procurement practices and settlement systems.

The exploitation of broad ranges of resources over very large areas during the period of 11,500-4,200 BP shifted to a more-intensive procurement focus on highly productive resources like camas and salmon, as well as the increase of food processing during the later period of 4,200-250 BP, evidenced by more mortar-and-pestle-ground stone tools. This period also saw an increase in house pit building and the development of food storage methods as people began to settle for longer periods of time in order to take advantage of certain seasonal resources within one area.

The Snake River Basin area was traditionally used by the Shoshone and Bannock Tribes, two linguistically distinct populations. Both Tribes practiced a way of life consistent with other Great Basin cultures, including their subsistence practices. Though the land contained a wide variety of resources, it could not sustain large groups of people in one place throughout the

year. Therefore, people adapted a semi-nomadic lifestyle, moving from resource to resource as they became available, and utilizing many different kinds of foods, including plant resources such as roots, tubers, berries, and nuts, and animal resources like squirrels, marmots, rabbits, insects, large game, fish, and freshwater shellfish. By the time of the earliest Euro-American contact within the Snake River Basin in the early 1800s, the Shoshone and Bannock Tribes had already been introduced to—and were utilizing with great efficacy—an important new resource, the horse (Reclamation 2000). Incorporation of the horse into the Shoshone-Bannock way of life was rapid, and "drastically modified their economic and political institutions" (Walker 1978).

The earliest Euro-Americans in south-central Idaho came to develop the fur trade, to convert the Native Americans, or to explore and survey the region. The latter group helped to determine the best routes for military and immigrant roads to Oregon and California. Early trails to and along the Snake River were established by Indian peoples and then used by trappers and explorers. The major east-west travel route of these early explorers passed along the Snake River. Portions of the route later became the Oregon Trail, first used by emigrants in 1841 (Ozbun et al. 2000).

By the end of the 19th century, forced relocation of Native American groups, including the Shoshone-Bannock and Shoshone-Paiute, to reservations resulted in the expansion of Euro-American settlements into the Snake River Plain, beginning in the 1870s. Many of these settlers were Mormons expanding the new religion's territory out of Utah Territory. The arrival of Union Pacific's Oregon Short Line railroad in the early 1880s proved crucial to the development of southeastern Idaho, helping to speed up the settlement of the region. Agriculture served as the primary economic activity of settlers in south-central Idaho in the late 19th and early 20th centuries, and irrigation systems were of signal importance to that development by drawing on the Upper Snake River watershed to support farming (Ozbun et al. 2000).

3.7.1.1 Previous Investigations and Identified Cultural Resources

3.7.1.1.1 Bennett Mountain

Eighteen cultural resource inventories have been conducted since 1989 within a 1-mile vicinity of the Bennett Mountain portion of the proposed action. During the course of those inventories, one historic property, the Bennett Mountain Lookout (BLM #15FRF024A), was recorded within the project area of potential effect (APE).

3.7.1.1.2 Notch Butte

A rich archaeological record occurs in the general area of Notch Butte. Most notably is Wilson Butte Cave (10JE6), which contains some of the earliest evidence of occupation on the Snake River Plain, with stratified deposits that showed "continuous periodic use during the previous 10,000 years" (Plew 2000), extending back into the Paleoindian era. Wilson Butte lies fewer than 20 miles to the southeast of Notch Butte. Subsequently, radiocarbon

dates from deer bone collagen collected from a cobble tool at the Crutchfield Site (10GG191), about 50 miles southwest of Notch Butte, indicates a Middle Archaic (5,000-4,000 years Before Present) occupation (Meatte 1990).

The area around Notch Butte itself contains evidence of both pre-contact and historic-era activity. Cultural resources research, including a record search with the Idaho State Historic Preservation Office, revealed that sites or isolated finds have been previously documented near the proposed microwave communication facility location.

3.7.1.1.3 **Reclamation Office Facilities**

Of the three proposed installation locations for microwave towers at Reclamation-managed facilities, only the Upper Snake Field Office (USFO) contained a historic property within the APE. Archaeological site (10MA273) is a portion of an alternate route of the Oregon Trail; however, no visible elements have been documented within a 1-mile radius of the project APE and the segment is considered non-contributing. Two architectural resources were once located within the APE of the Snake River Area Office (SRAO) but were determined ineligible and have been destroyed prior to the construction of SRAO. No resources were located within the APE of the tower proposed at the Pacific Northwest Regional Office.

3.7.2 Environmental Consequences

3.7.2.1 Alternative A – No Action

Alternative A, as the No Action alternative, would not directly result in adverse effects to historic properties.

3.7.2.2 Alternative B – Proposed Action

3.7.2.2.1 **Bennett Mountain**

The Bureau of Land Management has determined in concert with SHPO that the removal of the existing fire lookout on Bennett Mountain is necessary and will be mitigated through the measures laid out in the signed MOA signed by BLM and SHPO (Appendix E.) As such, removal of the lookout would be mitigated through the interpretive materials as well as the preservation of the fire lookout located on South Mountain in Owyhee County that is still being utilized by BLM. Installation of Reclamation's microwave facility has potential to cause a minor adverse effect to the associated history associated with this era and style of fire lookout.

3.7.2.2.2 **Notch Butte**

On February 13, 2015, an archaeologist with the BLM Shoshone Field Office performed a cultural resources inventory of Reclamation's proposed microwave communication facility location. No new cultural resources were located in the APE. A nearby eligible site was noted, but determined to be outside the APE and as such, would have no effect.

However, neither of those resources are located within the project APE and will be avoided. Reclamation, based upon the results of the inventory and a search of existing data, reached a finding of no effect to historic properties within the APE for the proposed action (BLM 2015). There is no evidence that an adverse effect to a historic property, directly or indirectly, would occur as a result of the proposed action.

3.7.2.2.3 **Reclamation Office Facilities**

Reclamation initiated consultation under Section 106 of the National Historic Preservation Act (NHPA) on for the installation of three communications towers at existing facilities managed by Reclamation. Two of the towers will consist of a 6- to 8-foot microwave antenna to be attached to the roof of the Pacific Northwest Regional Office (PNRO) and the Snake River Area Office (SRAO) buildings. At the third location, the Upper Snake Field Office (USFO), an 80- to 100-foot communications tower will be built within the existing facilities' compound. All locations were considered an undertaking under Section 106 of the NHPA, and consultation with the Idaho SHPO, Shoshone-Bannock Tribes and Shoshone-Paiute Tribes of the Duck Valley Indian Reservation was initiated in March of 2015. Based upon existing data, there is no evidence that an adverse effect to a historic property, directly or indirectly would occur as a result of the proposed action. Reclamation reached a finding of No Adverse Effect for the proposed action and received concurrence from the consulting parties on July 22, 2015.

3.7.2.3 Alternative C – Private Land Option, Bennett Mountain

The only difference proposed with this alternative is the placement of the lookout tower on Bennett Mountain. No historic properties were identified at the Alternative C location. There is no evidence that an adverse effect to a historic property, directly or indirectly, would occur as a result of the proposed action. However, the removal of the lookout is a pre-existing legal requirement upon the termination of the easement between the private landowner and BLM.

3.7.2.4 Cumulative Effects

Due to lack of impacts, no cumulative effects to cultural resources are anticipated as a result of the proposed project under Alternatives A, B, or C.

3.8 Sacred Sites

3.8.1 Affected Environment

This section discusses sacred sites as defined by Executive Order (EO) 13007 and the potential for impacts on sacred sites. Sacred sites are defined by EO 13007 as specific, discrete, narrowly delineated locations on Federally owned land that is identified by an Indian individual or Tribe determined to be an identified and appropriate representative of an Indian religion, as sacred by virtue of its established religious importance to, or ceremonial use by, an Indian religion. As a part of EO 13007 and the MOU between ACHP and multiple Federal

agencies, Federal agencies must accommodate access to and ceremonial use of all Indian sacred sites by Indian religious practitioners, and avoid any adverse effects to the physical integrity of sacred sites. In addition to this, Federal agencies must also make a good-faith effort to improve the protection of tribal access to Indian sacred sites through enhanced and improved interdepartmental coordination and collaboration.

There is no information available on any specific Indian sacred sites within any portion of the project area. However, because information about Indian sacred sites is not widely shared outside of traditional communities, the potential for their existence in any location exists and must be taken into consideration. Sacred sites can be various natural features and locations on the landscape that hold spiritual or religious significance to aboriginal Tribes, and may be in the form of various physical and natural features. Examples of such features include mountains, foothills, buttes, springs, lakes, rivers, and rock shelters, among others. Additionally, specific cultural sites may be regarded as sacred to Tribes such as altars; vision question sites; water sources, springs, and headwaters; burial sites; historical places where significant events occurred; and others.

3.8.2 Environmental Consequences

3.8.2.1 Alternative A – No Action

Under the No Action alternative, there would be no direct or indirect effects to Indian sacred sites in any of the project locations. None of the alternatives would be constructed and there would be no need for ground disturbance, excavation, or equipment staging areas. The existing conditions would remain intact and would not be affected.

3.8.2.2 Alternative B – Proposed Action

In all project locations, potential impacts to Indian sacred sites can only be dealt with in a generalized fashion due to the fact that the specific location and nature of sacred sites within the proposed project areas of potential effect (APEs) are unknown. If Indian sacred sites are located within the proposed project APE, their integrity can be compromised not only by physical disturbances, but also by audio or visual intrusions that change the association, feeling, or character of the site. If this is the case, their sacredness and overall importance as a sacred or religious site can be reduced. EO13007 does not authorize Federal agencies to mitigate the impacts of their own actions upon Indian sacred sites. Nevertheless, it does direct them to avoid adverse impacts to the extent possible.

3.8.2.3 Alternative C – Private Land Option, Bennett Mountain

Impacts to sacred sites would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternative B and C, the impacts would not differ.

Impacts to sacred sites at Notch Butte would be the same as those described in Alternative B.

3.8.2.4 Cumulative Effects

Due to lack of impacts, no cumulative effects are anticipated on this resource as a result of the proposed project.

3.9 Indian Trust Assets

3.9.1 Affected Environment

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States for Indian tribes and individuals. The Secretary of the Interior, acting as trustee, holds many assets in trust for Indian tribes and individuals. Examples of trust assets are lands, minerals, grazing, hunting, fishing, and water rights. While most ITAs are on-reservation, they may also be found off-reservation on Federally managed unoccupied lands.

The United States has a responsibility to protect and maintain rights reserved by or granted to Indian tribes and Indian individuals by treaties, statutes, and executive orders. These are sometimes further interpreted through court decisions and regulations.

The Shoshone-Bannock Tribes, which are Federally recognized tribes and are located at the Fort Hall Indian Reservation in southeastern Idaho, have trust assets both on and off reservation lands. The Fort Bridger Treaty was signed and agreed to by the Bannock and Shoshone headman on July 3, 1868. The treaty states in Article 4, that members of the Shoshone-Bannock Tribes "…shall have the right to hunt on unoccupied lands of the United States…" This has been interpreted to mean unoccupied Federal lands and to include fishing as a form of hunting.

The tribes included fishing after the case of State of Idaho vs. Tinno, an off-reservation fishing case in Idaho. The Idaho Supreme court determined that the Shoshone word for "hunt" also included "fish." Under Tinno, the court affirmed the Tribal Members' right to take fish off-reservation pursuant to the Fort Bridger Treaty (Shoshone-Bannock Tribes v. Fish & Game Commission Idaho 1994).

Other Federally recognized Tribes are the Shoshone-Paiute Tribes of the Duck Valley Reservation, located on the Idaho/Nevada border, and the Burns Paiute near Burns, Oregon. These Tribes have cultural and religious interests in the area of the proposed project. These interests are protected under historic preservation laws, NAGPRA, and EO 13007 – Indian sacred sites.

3.9.2 Environmental Consequences

3.9.2.1 Alternative A – No Action

3.9.2.1.1 Bennett Mountain

Under the No Action alternative, there would be no direct, indirect, or cumulative effects to ITAs. The proposed microwave communication facility on Bennett Mountain would not be constructed. Reclamation and BPA facilities would continue to operate as they have previously under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication would continue. The existing conditions would remain intact and would not be affected.

3.9.2.1.2 Notch Butte

Under the No Action alternative, there would be no direct, indirect, or cumulative effects to ITAs. The proposed microwave communication facility on Notch Butte would not be constructed. Reclamation and BPA facilities would continue to operate as they have previously under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication would continue. The existing conditions would remain intact and would not be affected.

3.9.2.1.3 Reclamation Office Facilities

Under the No Action alternative there would be no direct, indirect, or cumulative effects to ITAs. The proposed communication equipment to be installed at Reclamation's Pacific Northwest Regional Office, Snake River Area Office, and Upper Snake Field Offices would not be installed. Reclamation and BPA facilities would continue to operate as they have previously under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication would continue. The existing conditions would remain intact and would not be affected.

3.9.2.2 Alternative B – Proposed Action

3.9.2.2.1 Bennett Mountain

Alternative B would not affect any known ITAs of lands, minerals, water rights, monetary holdings, and gathering rights in the direct vicinity of Bennett Mountain. Overall ground disturbance is estimated to be less than 1 acre. Access to the proposed microwave communication facility would be via existing roads. Once installation is completed, Reclamation anticipates accessing the site three to five times a year for maintenance. Therefore, no impacts to ITAs would be expected.

As part of its scoping process, Reclamation requested information from Tribes that traditionally and currently use the area; however, no responses were received. The lack of specific information about the area is not indicative of a lack of importance to Tribes. With no specific response, Reclamation assumes that there would be no adverse effects to ITAs

such as lands, minerals, water rights, monetary holdings, and gathering rights in the direct vicinity of the proposed microwave communication facility on Bennett Mountain. Implementation of the Alternative B would not affect tribal hunting and fishing rights outside of the study area.

No known cumulative impacts to ITAs would occur as a result of Alternative B.

3.9.2.2.2 **Notch Butte**

Alternative B would not affect any known ITAs of lands, minerals, water rights, monetary holdings, and gathering rights in the direct vicinity of Notch Butte. Overall ground disturbance is estimated to be less than 1 acre. Access to the proposed microwave communication facility would be via existing roads. Once installation is completed, Reclamation anticipates accessing the site three to five times a year for maintenance. Therefore, no impacts to ITAs would be expected.

As part of its scoping process, Reclamation requested information from Tribes that traditionally and currently use the area; however, no responses were received. The lack of specific information about the area is not indicative of a lack of importance to Tribes. With no specific response, Reclamation assumes that there would be no adverse effects to ITAs such as lands, minerals, water rights, monetary holdings, and gathering rights in the direct vicinity of the proposed microwave communication facility on Notch Butte. Implementation of the Alternative B would not affect tribal hunting and fishing rights outside of the study area.

No known cumulative impacts to ITAs would occur as a result of Alternative B.

3.9.2.2.3 **Reclamation Office Facilities**

Alternative B would not affect any known ITAs of lands, minerals, water rights, monetary holdings, and gathering rights in the direct vicinity of the Reclamation Office Facilities. The additional communication equipment would be installed in order to complete the communication links to the Black Canyon Control Center. Reclamation's Pacific Northwest Regional and Snake River Area Offices are located in Boise, Idaho, in an urban setting. The Upper Snake River Field Office is located within Heyburn, Idaho, in a rural setting. All three of the Reclamation Office Facilities are located on developed property; therefore, no ITAs impacts would be expected.

As part of its scoping process, Reclamation requested information from Tribes that traditionally and currently use the area; however, no responses were received. The lack of specific information about the area is not indicative of a lack of importance to Tribes. With no specific response, Reclamation assumes that there would be no adverse effects to ITAs such as lands, minerals, water rights, monetary holdings, and gathering rights in the direct vicinity of the Reclamation Office Facilities. Implementation of Alternative B would not affect tribal hunting and fishing rights outside of the project area.

No known cumulative impacts to ITAs would occur as a result of Alternative B.

3.9.2.3 Alternative C – Private Land Option, Bennett Mountain

Impacts to ITAs would be the same as those described for the Bennett Mountain site in Alternative B. Because of the close proximity of the proposed sites in Alternatives B and C, the impacts would not differ.

Impacts to ITAs at Notch Butte would be the same as those described in Alternative B.

3.10 Environmental Justice

EO 12898 (59 FR 7629) requires Federal agencies to achieve environmental justice by addressing "disproportionately high and adverse human health and environmental effects on minority and low-income populations." To determine if environmental justice populations are present, the Federal agency examines the demographics of the affected area to determine if minority (including Native American) and/or low-income populations are present. If present, the agency must determine if implementation of the Proposed Action would cause disproportionately high and adverse human health or environmental effects on the populations.

3.10.1 Affected Environment

Table 3-3 summarizes the racial characteristics of Ada, Elmore, Lincoln, and Minidoka counties within the project area and compared to Idaho overall. Information contained in the 2013 Census of Population was used to identify these populations. The 2013 Census data for the white racial category comprises the highest percentage for Ada, Elmore, Lincoln, and Minidoka Counties, and Idaho (U.S. Census Bureau 2015).

By definition from the Federal Office of Management and Budget, race and Hispanic or Latino origin are two separate categories. People who report themselves as Hispanic or Latino can be of any race. Therefore, in Table 3-3, the number of Hispanics or Latinos is not added to the totals of the race columns. For example, Hispanics and Latinos who are white are counted in the total of white in the race table, and Hispanics who are black or African American are counted in that race category.

Table 3-3. Summary of racial populations in Ada, Elmore, Lincoln, and Minidoka Counties

U.S. Census Bureau 2013 Statistics	Ada	Elmore	Lincoln	Minidoka	Idaho
2013 Total Population Estimate	416,556	26,156	5,307	20,310	1,612,843
White, percent	92.5	88.6	95.8	94.7	93.7
Black or African American, percent	1.3	3.0	0.5	0.7	0.8
American Indian and Alaska Native, percent	0.8	1.6	1.6	2.1	1.7
Asian, percent	2.6	2.9	0.5	0.7	1.4

U.S. Census Bureau 2013 Statistics	Ada	Elmore	Lincoln	Minidoka	Idaho
Native Hawaiian or Pacific Islander, percent	0.2	0.4	0.1	*	0.2
Two or More Races, percent	2.6	3.4	1.4	1.9	2.2
Hispanic or Latino, percent	7.5	16.1	28.4	33.0	11.8
White alone, not Hispanic or Latino, percent	85.8	74.4	68.7	64.3	83.1

*-Value greater than zero but less than half unit of measure shown.

Low-income populations are identified by several socioeconomic characteristics. Specific characteristics used in this description of the existing environment, as categorized by the 2013 Census, are income (per capita income and median household income) and percentage of the population below poverty. Table 3-4 provides income and poverty information for the State of Idaho and Ada, Elmore, Lincoln, and Minidoka counties.

Table 3-4. Income and poverty- Ada, Elmore, Lincoln, and Minidoka Counties

Geographic Area	Per Capita Income	Median Household Income	People Below Poverty
Idaho State	$22,568	$46,767	15.5%
Ada County	$27,452	$55,210	13.1%
Elmore County	$20,646	$42,842	16.3%
Lincoln County	$16,530	$42,433	16.6%
Minidoka County	$19,597	$43,266	13.6%

*Information taken from U.S. Census Bureau: State and County QuickFacts for years 2009-2013 (U.S. Census Bureau 2015).

Ada County has the highest per capita and median household incomes ($27, 452 and $55,210, respectively) of the four locations and the State of Idaho. Additionally, Ada County has the lowest percentage of people below the poverty rate (13.1 percent). Conversely, Lincoln County had the lowest per capita and median household income ($16,530 and $42,433, respectively), and the highest percentage of people below the poverty rate (16.6 percent).

3.10.2 Environmental Consequences

3.10.2.1 Alternative A – No Action

Under the No Action alternative, the proposed microwave communication facilities on Bennett Mountain and Notch Butte and placement of communication equipment at the three

office locations would not be installed. Reclamation and BPA facilities would continue to operate as they have previously under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication would continue. The existing conditions would remain intact and would not be affected. No impacts adversely affecting minority and low-income populations have been identified; therefore, there would be no environmental justice impacts.

3.10.2.2 Alternative B – Proposed Action

Installation of the proposed microwave communication facilities at Bennett Mountain and Notch Butte and placement of communication equipment at the three office locations would not require the relocation of any residents. Implementation of the Proposed Action would not result in any disproportionate adverse impacts on low-income and/or minority populations.

3.10.2.3 Alternative C – Private Land Option, Bennett Mountain

Environmental justice impacts would be the same as those identified in Alternative B.

3.10.2.4 Cumulative Effects

Due to lack of impacts, no cumulative effects are anticipated on this resource as a result of the proposed project.

3.11 Socioeconomics

3.11.1 Affected Environment

Current population trends, employment, and income for Ada, Elmore, Lincoln, and Minidoka counties are discussed below.

3.11.1.1 Population

With 425,000 residents, Ada County is Idaho's most populous county. It is best known regionally for its government, industry, and education-centric atmosphere. During the years leading up to the recession, Ada County's comparatively low real estate prices and outdoor lifestyle attracted many people from other states. Since 2003, Ada County has increased by 91,310 residents. Between 2013 and 2014, Ada County grew 2.3 percent. Since then, population growth has slowed but is still growing at a more rapid rate than the country as a whole (Idaho Dept. of Labor 2015 a).

There has been a fluctuation in Elmore County's population over the past decade, and it has decreased about 1 percent since 2004. This decrease is due to the presence of Mountain Home Air Force Base and the assignment or reassignment of military wings, which requires the relocation of hundreds of members of the Air Force and their families. Elmore County is appealing to many residents due to its more rural lifestyle with less traffic congestion than

Ada and Canyon Counties, and is within commuting distance to Boise (Idaho Dept. of Labor 2015b).

In the last 10 years, Lincoln County's population has grown 22 percent, which is more than any other county in the region. Shoshone is the county seat, with a population of 1,494. Dairies are the main contributor to the industry's regional growth, but hardware manufacturing and food processing also have also contributed to the region's growth. Subdivision and residential construction is expected to continue to grow over the long term due to the growing need for affordable housing in the Wood River Valley (Idaho Dept. of Labor 2015c).

Minidoka County's population increased 6 percent in the last decade; most of that growth took place in 5 of the last 6 years. The county seat, Rupert, had a population of 5,617 in 2013. This county is highly dependent on food processing and agriculture. However, the county now includes durable manufacturing and retail and wholesale, due to agricultural ties. New businesses are attracted to the area's low wages, which creates the challenge of attracting and retaining employees. Higher wages have been offered by new employers but are still lower when compared to competing states. New residents are drawn to the area's renewed economic vitality, recreational opportunities, and beautiful scenery (Idaho Dept. of Labor 2015d).

Table 3-5. Demographics for Ada, Elmore, Lincoln, and Minidoka Counties

U.S. Census Bureau 2013 Statistics	Ada	Elmore	Lincoln	Minidoka
2013 Total Population Estimate	416,556	26,156	5,307	20,310
Population, percent change - April 1, 2010 to July 1, 2013	6.2%	-3.30%	1.9%	1.20%
Persons under 5 years, percent	6.4%	8.20%	7.0%	8.10%
Persons under 18 years, percent	25.5%	26.40%	30.7%	28.50%
Persons 65 years and over, percent	12.1%	11.40%	12.2%	15.50%
Female persons, percent	50.0%	47.90%	48.7%	49.60%

* Information taken from U.S. Census Bureau: State and County QuickFacts for years 2010-2013 (U.S. Census Bureau 2015).

3.11.1.2 Employment and Income

The Ada County labor force grew significantly between 2004 and 2014, increasing by more than 33,000. However, Ada County has more jobs than its labor force supports, requiring commuters from neighboring counties to fill them. Ada County per capita income increased to $42,395 in 2013, an increase of $1,145 from 2012. This is 17 percent higher than Idaho state per capita income, but 5 percent, or $2,370, less than national per capita income. The county

consistently posts unemployment rates below the state-wide average. The year 2013 continued to show an increase in the county's annual payroll, adding 6,700 covered jobs.

Four industrial sectors made up nearly 80 percent of the growth. The largest growth was in the trade, utilities, and transportation sector, which added 1,733 jobs. This was followed by an additional 1,250 jobs each in construction, education, and health care. Leisure and hospitality was the fourth sector, with an additional 1,140 jobs. Construction and manufacturing lost more than 6,000 jobs between 2004 and 2014. These sectors made up 18 percent of the covered employment in 2003 but comprise only 13 percent now. Despite the recession, education and health care gained more than 10,800 jobs since 2004. This sector was followed by trade, utilities, and transportation, with almost 6,300 new jobs. Leisure and hospitality added more than 4,500 jobs over the decade, while professional and business services jobs increased by 2,315 (Idaho Dept. of Labor 2015a).

Despite a fluctuating population, Elmore County's civilian labor force has grown over the past decade, with an overall increase of almost 4 percent since 2004. However, its unemployment rate more than doubled from the 2006 low point of 3.6 percent. The number of unemployed rapidly increased between 2007 to 2010 before leveling off in 2011 and declining into 2014. Air base personnel are not part of the civilian labor force, but their spouses can be if working or searching for a job. Elmore County had a per capita income of $38,503 in 2013, up more than $2,000 from 2012. Over the decade, educational and health services and manufacturing have posted the largest gains, while government and trade, utilities, and transportation have lost more than 650 jobs (Idaho Dept. of Labor 2015b).

In 3 of the last 5 years, the Lincoln County unemployment rate has been in double digits, well above the state and national rates. Per capita income in Lincoln County has spiked over the last decade, increasing 54 percent, which is more than in Idaho and the country as a whole. Yet, it is still the lowest per capita income in the region. Continued low wages are the result of many low-paying service and agriculture jobs. From 2012 to 2013, average covered employment's wage increased 2.5 percent, with a corresponding move in average employment of 2.4 percent. Economic diversification has created new jobs over the last 5 years, mainly in manufacturing and the services. Dairies have brought stability to a workforce that traditionally sought jobs in seasonal industries such as tourism, landscaping, and agriculture. Prior to the recession, retail had been popping up to serve the highway traffic between Twin Falls and the Wood River Valley. Manufacturing jobs are stable and raising area wages. Hay, grains, corn and other crops that can be green-chopped for dairy silage are the primary commodities. State and Federal agencies provide seasonal and year-round employment. The surrounding small communities all saw interest in new housing prior to the downturn. The county is expected to continue steady growth as the economy rebounds and the higher-paying jobs return to Blaine County (Idaho Dept. of Labor 2015c).

Minidoka County is commonly joined to Cassia County and referred to as the Mini-Cassia area. Employment in Minidoka County has traditionally been seasonal. The city of Burley lies in both counties, divided by the Snake River, and both counties are linked economically,

politically and socially. The area offers a labor pool with a strong work ethic and a strategic location with convenient access to commercial rail and Interstate 84, with I-86 nearby. Food processing plants and agriculture (mostly potatoes, dairy, and fruit) have a large presence in the Mini-Cassia area. Minidoka County per capita income increased to $37,546 in 2013, from $35,118 in 2012. The unemployment rate peaked at 10.7 percent in 1986 and fell to a record low 3.8 percent in 2007 (Idaho Dept. of Labor 2015d).

3.11.2 Environmental Consequences

3.11.2.1 Alternative A – No Action

Under the No Action alternative, the proposed communication facilities on Bennett Mountain and Notch Butte and communication equipment at the three office locations would not be installed. Reclamation and BPA facilities would continue to operate as they have previously under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication would continue. The existing conditions would remain intact and would not be affected. The socioeconomics would continue as they have been in the past.

3.11.2.2 Alternative B – Proposed Action

Under the Proposed Action alternative, installation activities would bring short-term, minor economic gains to a few individual contractors, but this would not likely to translate any appreciable long- or short-term economic gains in the local areas. No changes are expected to the ethnographic demographics due to effects from the proposed project.

3.11.2.3 Alternative C – Private Land Option, Bennett Mountain

Socioeconomic impacts would be the same as those described in Alternative B.

3.11.2.4 Cumulative Effects

Due to lack of impacts, no cumulative effects are anticipated on this resource as a result of the proposed project.

3.12 Climate Change

3.12.1 Affected Environment

Climate change has the potential to profoundly alter habitats through both direct and indirect effects. Future projections suggest that the Pacific Northwest may gradually become wetter than historical conditions. This is also significantly different from projections in the southern United States. Warming trends may lead to a shift in cool-season precipitation, resulting in more rain and less snow, which would cause increased rainfall runoff volume during the cool season, accompanied by less snowpack accumulation (Reclamation 2011). Future climate

projections based on hydrologic analyses suggest that warming and associated loss of snowpack would persist over much of the western United States.

Warming is expected to diminish the accumulation of snow during the cool season (i.e., late autumn through early spring) and the availability of snowmelt to sustain runoff during the warm season (i.e., late spring through early autumn). Decreased snowpack volume also could result in decreased groundwater infiltration, runoff, and ultimately decreased contribution to summer base flow in rivers.

Warming is expected to lead to more rainfall runoff during the cool season than snowpack accumulation. This would lead to increases in the December to March runoff and decrease the April-to-July runoff. For example, for cold-water-associated salmonids in mountainous regions, where the upper distribution is often limited by impassable barriers, an upward thermal shift in suitable habitat can result in a reduction in size of suitable habitat patches and loss of connectivity among patches, which in turn can lead to a population decline (USFWS 2011).

The Climate Impacts Group (CIG) at the University of Washington has analyzed the effects of global climate change on the Pacific Northwest (CIG 2006). Relative to average temperatures from 1970 to 1999, climate models project a future rate of warming in the Pacific Northwest of approximately 0.5° F (0.3° C) per decade through 2050, with the greatest temperature increases being during June through August. Models also indicate rising temperatures could affect regional precipitation including decreased snow packs and summer flows, increased winter flows, and earlier spring runoffs.

In 2011, Reclamation completed the River Management Joint Operating Committee (RMJOC) Climate Change Study in collaboration with the BPA and the Corps, to adopt climate change and hydrology datasets for their longer-term planning activities in the Columbia-Snake River Basin. These agencies collaborated to develop climate change and hydrology datasets to be used in their longer-term planning activities in the Columbia-Snake River Basin.

The RMJOC is a subcommittee of the Joint Operating Committee that was established through direct funding MOAs between BPA, Reclamation, and the Corps. Four reports were generated as a result of this work and include:

- Part I: Future Climate and Hydrology Datasets
- Part II: Reservoir Operations Assessment – Reclamation Tributary Basins
- Part III: Reservoir Operations Assessment – Columbia Basin Flood Control and Hydropower
- Part IV: Summary Report

These reports can be downloaded online at http://www.usbr.gov/pn/climate/planning/reports/index.html. The three partners are collaborating again to update the RMJOC Climate Change Study results and to generate new hydrology and climate change datasets for use. In the first RMJOC Climate Change Study, projections were selected based on the changes in temperature and precipitation averaged over the Columbia River Basin. When these same projections were used to evaluate the Snake River basin, they tended toward wetter conditions overall. In the update to the RMJOC Climate Change Study, projections would be selected based on temperature and precipitation changes over the Snake River basin, which would provide for a broader range of wet to dry in potential future climate. This work is ongoing and is anticipated to be completed by FY17.

3.12.2 Environmental Consequences

3.12.2.1 Alternative A – No Action

The environmental consequences analysis for the climate change section analyzes two scenarios: what impacts the action (No Action or Proposed Action) has on climate change, and what impacts climate change has on the action. Both scenarios are presented for each alternative.

The No Action alternative would have no effect on climate change in the long or short terms. The proposed microwave communication facilities on Bennett Mountain and Notch Butte and the communication equipment at the three office locations would not be installed. Reclamation and BPA facilities would continue to operate as they have previously under the existing constraints and security measures. An existing system of microwave, radio, and land-line communication would continue to be used. The existing conditions would remain intact and have no effect on climate change.

In the long term (more than 10 years), climate change could alter precipitation patterns and river hydrology. This could result in potential increases or decreases in the magnitude and duration of flow events, alter the timing of snowmelt, increase or decrease flow regimes, and change river level. All of these factors could influence physical sites and biological communities, affecting species assemblages, timing, and use of the project area, and could also lead to changes in noxious and invasive weed cover. Additionally, climate change could indirectly affect soil erosion rates due to more or less precipitation. These would occur regardless of an action.

3.12.2.2 Alternative B – Proposed Action

Installation of the proposed microwave communications facilities at Bennett Mountain, Notch Butte, and, to a lesser extent, the Upper Snake Field Office, would require heavy equipment operations that would use fossil fuels and emit exhaust that partially contributes to climate change. Additionally, these locations would require periodic maintenance, likely resulting in additional traffic to these sites, also increasing exhaust emission. These emissions would not

be expected to affect climate change in the short or long term because the amount of vehicle/equipment emissions is relatively minor and would occur in a short amount of time (i.e., less than 6 months for installation and approximately six maintenance trips to both locations). Installation of the communication equipment at the three office locations is not likely to have any effects (short or long term) on climate change.

Effects of climate change on the project areas are the same as those identified in the No Action alternative. However, restoration of disturbed land (reseeding with native vegetation) and maintenance of project facilities (weed control) would reduce the potential impacts on soil erosion and weed infestation from climate change in the short and long term.

3.12.2.3 Alternative C – Private Land Option, Bennett Mountain

Climate change impacts (both to climate change and from climate change) would be the same as those described in Alternative B.

3.12.2.4 Cumulative Effects

Past, present, and reasonably foreseeable future impacts of livestock grazing and the potential of future increases of communication facilities, when added to the current impact of this proposed project on climate change, would be minimal. Livestock grazing can directly contribute methane gas and negatively affect vegetation, both of which have been shown to release greenhouse gas emissions that contribute to climate change. Additionally, emissions from heavy equipment during installation and additional traffic necessary for periodic maintenance to the proposed microwave communication facilities would also contribute greenhouse gasses.

However, the BLM manages public land grazing in these areas and monitors rangeland health conditions to ensure proper grazing management and a healthy rangeland, which would mitigate potential effects to climate change in both the short and long term. Also, because the density of livestock would not likely drastically increase, the potential for increased methane emissions are unlikely in the long term. Actively restoring the disturbed land (reseeding with native vegetation) and maintenance of project facilities (weed control) would reduce the potential impacts on soil erosion and weed infestation from climate change in the short and long term. Therefore, these effects combined with past, present, and future effects, the resultant total cumulative effects would likely be minimal in the short and long term.

Chapter 4 CONSULTATION AND COORDINATION

4.1 Public Involvement

In March and April 2015, BLM and Reclamation mailed a scoping document to more than 80 agencies, Indian Tribes, members of Congress, organizations, and individuals soliciting their help in identifying any issues and concerns related to the proposed microwave communication facilities installations. These comments and BLM's/Reclamation's responses are included as Appendix B.

4.2 Agency Consultation and Coordination

BLM and Reclamation mailed scoping letters to Air National Guard, Army National Guard, Idaho Department of Fish and Game, Idaho Bureau of Homeland Security, Idaho Department of Administration, Idaho Department of Agriculture, Idaho Department of Lands, Mountain Home Air Force Base, U.S. Forest Service and U.S. Fish and Wildlife Service in April 2015.

Reclamation additionally consulted with the U.S. Air Force Flight Operations Section, Mountain Home Air Force Base on November 21, 2014, and January 13, 2015. In the last communication, the Air Force stated that due to location of the proposed microwave communication facility at Bennett Mountain being so far north of their operations zone, that they would not have any objection to the facility at that location or require any visual cues.

Consultation with SHPO for Notch Butte was initiated on July 22, 2015 (Appendix C). SHPO concurred with Reclamation's finding of no historic properties affected for the project. BLM and SHPO did identify the fire lookout on Bennett Mountain to be eligible for listing on the National Register of Historic Places (NRHP). Due to the age of the fire lookout structure and the architectural style that is from the 1960's, BLM has entered into consultation under Section 106 of the National Historic Preservation Act and developed and signed a Memorandum of Agreement (MOA) with SHPO related to the removal of the lookout. The MOA is included as Appendix XXX of this analysis. In short, BLM and a private landowner have previously agreed to legal terms that at such time that the existing fire lookout structure at Bennett Mountain is no longer utilized, it must be removed. The removal of the lookout would be mitigated through the interpretive materials as well as the preservation of the fire lookout located on South Mountain in Owyhee County that is still being utilized by BLM. No other historic properties were identified within the APE of Bennett Mountain.

4.3 Tribal Consultation and Coordination

BLM and Reclamation mailed scoping letters to the: Shoshone-Bannock Tribes; Shoshone-Paiute Tribes, Burns Paiute Tribe, and Northwestern Shoshone Tribe in

March 2015 (Appendix D). No response or concerns from the Tribes were brought forward during the scoping period. BLM conducted formal consultation with the Shoshone-Paiute Tribes through the BLM Wings and Roots process on March 19, 2015. Additionally, Reclamation formally met with the Shoshone-Bannock Tribes on May 19, 2015 at Fort Hall, Idaho. No comments concerning the proposed project were raised during either meeting.

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Appendix A – Bureau of Reclamation's Application to BLM

STANDARD FORM 299 (05/2009)
Prescribed by DOI/USDA/DOT
P.L. 96-487 and Federal
Register Notice 5-22-95

APPLICATION FOR TRANSPORTATION AND UTILITY SYSTEMS AND FACILITIES ON FEDERAL LANDS

FORM APPROVED
OMB Control Number: 0596-0082
Expiration Date: 10/31/2012

FOR AGENCY USE ONLY

Application Number

Date Filed

NOTE: Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.

1. Name and address of applicant *(include zip code)*	2. Name, title, and address of authorized agent if different from item 1 *(include zip code)*	3. Telephone (area code)
Bureau of Reclamation Snake River Area Office 230 Collins Road Boise, ID 83702-4520	Bureau of Reclamation Upper Snake River Field Office Tara Hagen, Realty Specialist 470 22nd Street Heyburn, ID 83336	Applicant (208) 383-2246 Authorized Agent (208) 678-0461 ext. 31

4. As applicant are you? *(check one)*

a. ☐ Individual
b. ☐ Corporation*
c. ☐ Partnership/Association*
d. ☐ State Government/State Agency
e. ☐ Local Government
f. ■ Federal Agency

** If checked, complete supplemental page*

5. Specify what application is for: *(check one)*

a. ■ New Authorization
b. ☐ Renewing existing authorization No.
c. ☐ Amend existing authorization No.
d. ☐ Assign existing authorization No.
e. ☐ Existing use for which no authorization has been received *
f. ☐ Other*

** If checked, provide details under item 7*

6. If an individual, or partnership are you a citizen(s) of the United States? ☐ Yes ☐ No

7. Project description (describe in detail): (a) Type of system or facility, *(e.g., canal, pipeline, road)*; (b) related structures and facilities; (c) physical specifications *(Length, width, grading, etc.)*; (d) term of years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for construction *(Attach additional sheets, if additional space is needed.)*

Reclamation is working with the Bonneville Power Administration (BPA) to address Reclamation's conversion to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operations; both agencies' requirements for critical infrastructure protection; and BPA's 10-year communication plan to construct an improved microwave backbone system from eastern Idaho to the Boise area. Reclamation and BPA will be sharing resources and bandwidth capacity at each communication site. Reclamation will be the lead for acquiring the required authorizations for the communication sites on Doe Point (United States Forest Service, being applied for under separate application), Bennett Mountain (BLM), and Notch Butte (BLM). BPA currently has an authorized communication site on Cotterel which they concur to allow Reclamation to co-locate within. Therefore, Reclamation will also need to acquire an authorization from BLM for the Cotterel site. Please see the attached Plan of Development for more detailed project information.

8. Attach a map covering area and show location of project proposal ✓

9. State or Local government approval: ☐ Attached ☐ Applied for ☐ Not Required

10. Nonreturnable application fee: ☐ Attached ■ Not required

11. Does project cross international boundary or affect international waterways? ☐ Yes ■ No *(if "yes," indicate on map)*

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

Reclamation is an agency within the Department of the Interior with the mission to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. Originally conceived under the Reclamation Act of 1902 as a means to help settle the West by providing infrastructure for agricultural development, the Reclamation program focused on the construction of dams and facilities to store and convey water. As the potential for additional project purposes was identified by the states and local entities, Congress supplemented the Reclamation Act to add hydropower production, flood control, municipal and industrial water, recreation, and fish and wildlife enhancement to the list of authorized project purposes. Unlike other Interior agencies that operate under an overall organic act or authority, Reclamation operates under specific authority for each project. Today, Reclamation projects continue to support this multipurpose mission. And, as the demand for water increases, Reclamation is improving its water management expertise and expanding partnerships with states, Indian Tribes, local communities, and other Federal agencies to meet the increased demand for water. As mandated by regulation, these facilities are considered critical infrastructure and the protection of such facilities with their security and operational systems are paramount to the agency meeting is fiduciary responsibilities. Reclamation has the technical and financial capability to construct, operate, maintain, and terminate the proposed communication sites.

13a. Describe other reasonable alternative routes and modes considered.

No other reasonable alternative routes were considered.

b. Why were these alternatives not selected?

c. Give explanation as to why it is necessary to cross Federal lands.

The Bennett Mountain, Notch Butte and Cotterel (Albion) sites are existing designated communication locations on Federal lands. These locations play an integral part within the existing communication backbone for both Reclamation and BPA facilities.

14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. *(Specify number, Date, code, or name)*

Reclamation will be submitting an application to the US Forest Service for the proposed communication site on Doe Point; no number has been assigned at this time. BPA Right-of-Way IDI-0-16828.

15. Provide statement of need for project, including the economic feasibility and items such as:(a) cost of proposal (construction, operation, and maintenance); (b) estimated cost of next best alternative; and (c) expected public benefits.

The proposed communication sites are integral for Reclamation and BPA to address Reclamation's conversion to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operations; both agencies' requirements for critical infrastructure protection; and BPA's 10-year communication plan to construct an improved microwave backbone system from eastern Idaho to the Boise area. The project is estimated to cost between $ 2.1 – 3.5 million. An alternative has not been considered or studied at this time. The project will provide a benefit or special service to the general public or to a program of the Secretary of Interior by improving the level of security of Federal telecommunications facilities pursuant to critical infrastructure protection requirements. It will also improve the telecommunication reliability for monitoring and controlling both Reclamation and BPA facilities.

16. Describe probably effects on the population in the area, including the social and economic aspects, and the rural lifestyles.

It's anticipated that the proposed communication sites at Notch Butte and Cotterel would have no or little effect on the population in the area and the rural lifestyles. However, the proposed Bennett Mountain site may impact the local private landowners as we would need to work with them on the provision of single-phase power to the proposed site.

17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability.

Please see Section 8 of the Plan of Development.

18. Describe the probable effects that the proposed project will have on (a) populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species; and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.

Please see Section 8 of the Plan of Development.

19. State whether any hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities. "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6901 et seq., and its regulations. The term hazardous materials also includes any nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERClA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas.

No hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities. However, propane will be stored on the right-of-way in association with the back-up power supply.

20. Name all the Department(s)/Agency(ies) where this application is being filed.

Bureau of Land Management – Boise District, 3948 Development Ave, Boise, ID 83705; Twin Falls District, 2536 Kimberly Road, Twin Falls, ID 83301

I HEREBY CERTIFY. That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge.

Signature of Applicant	Date
/s/ Jerrold D. Gregg	6/5/2014

Title 18, U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

GENERAL INFORMATION
ALASKA NATIONAL INTEREST LANDS

This application will be used when applying for a right-of-way, permit, license, lease, or certificate for the use of Federal lands which lie within conservation system units and National Recreation or Conservation Areas as defined in the Alaska National Interest lands Conservation Act. Conservation system units include the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System, and National Forest Monuments.

Transportation and utility systems and facility uses for which the application may be used are:

1. Canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other systems for the transportation of water.

2. Pipelines and other systems for the transportation of liquids other than water, including oil, natural gas, synthetic liquid and gaseous fuels, and any refined product produced therefrom.

3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation of solid materials.

4. Systems for the transmission and distribution of electric energy.

5. Systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communications.

6. Improved right-of-way for snow machines, air cushion vehicles, and all-terrain vehicles.

7. Roads, highways, railroads, tunnels, tramways, airports, landing strips, docks, and other systems of general transportation.

This application must be filed simultaneously with each Federal department or agency requiring authorization to establish and operate your proposal.

In Alaska, the following agencies will help the applicant file an application and identify the other agencies the applicant should contact and possibly file with:

Department of Agriculture
Regional Forester, Forest Service (USFS)
Federal Office Building,
P.O. Box 21628
Juneau, Alaska 99802-1628
Telephone: (907) 586-7847 *(or a local Forest Service Office)*

Department of the Interior
Bureau of Indian Affairs (BIA)
Juneau Area Office Federal Building Annex
9109 Mendenhall Mall Road, Suite 5
Juneau, Alaska 99802
Telephone: (907) 586-7177

Department of the Interior
Bureau of Land Management
222 West 7th Avenue
P.O. Box 13
Anchorage, Alaska 99513-7599
Telephone: (907) 271-5477 (or a local BLM Office)

U.S. Fish & Wildlife Service (FWS)
Office of the Regional Director
1011 East Tudor Road
Anchorage, Alaska 99503
Telephone: (907) 786-3440

National Park Service (NPA)
Alaska Regional Office,
2225 Gambell St., Rm. 107
Anchorage, Alaska 99502-2892
Telephone: (907) 786-3440

Note - Filings with any Interior agency may be filed with any office noted above or with the Office of the Secretary of the Interior, Regional Environmental Office, P.O. Box 120, 1675 C Street, Anchorage, Alaska 9513.

Department of Transportation
Federal Aviation Administration
Alaska Region AAL-4, 222 West 7th Ave., Box 14
Anchorage, Alaska 99513-7587
Telephone: (907) 271-5285

NOTE - The Department of Transportation has established the above central filing point for agencies within that Department. Affected agencies are: Federal Aviation Administration (FAA), Coast Guard (USCG), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA).

OTHER THAN ALASKA NATIONAL INTEREST LANDS

Use of this form is not limited to National Interest Conservation Lands of Alaska.

Individual department/agencies may authorize the use of this form by applicants for transportation and utility systems and facilities on other Federal lands outside those areas described above.

For proposals located outside of Alaska, applications will be filed at the local agency office or at a location specified by the responsible Federal agency.

SPECIFIC INSTRUCTIONS
(Items not listed are self-explanatory)

7. Attach preliminary site and facility construction plans. The responsible agency will provide instructions whenever specific plans are required.

8. Generally, the map must show the section(s), township(s), and range(s) within which the project is to be located. Show the proposed location of the project on the map as accurately as possible. Some agencies require detailed survey maps. The responsible agency will provide additional instructions.

9. , 10., and 12. The responsible agency will provide additional instructions.

13. Providing information on alternate routes and modes in as much detail as possible, discussing why certain routes or modes were rejected and why it is necessary to cross Federal lands will assist the agency(ies) in processing your application and reaching a final decision. Include only reasonable alternate routes and modes as related to current technology and economics.

14. The responsible agency will provide instructions.

15. Generally, a simple statement of the purpose of the proposal will be sufficient. However, major proposals located in critical or sensitive areas may require a full analysis with additional specific information. The responsible agency will provide additional instructions.

16. through 19. Providing this information is as much detail as possible will assist the Federal agency(ies) in processing the application and reaching a decision. When completing these items, you should use a sound judgment in furnishing relevant information. For example, if the project is not near a stream or other body of water, do not address this subject. The responsible agency will provide additional instructions.

Application must be signed by the applicant or applicant's authorized representative.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of the information is voluntary. If all the information is not provided, the application may be rejected.

DATA COLLECTION STATEMENT

The Federal agencies collect this information from applicants requesting right-of-way, permit, license, lease, or certification for the use of Federal lands. The Federal agencies use this information to evaluate the applicant's proposal. The public is obligated to submit this form if they wish to obtain permission to use Federal lands.

SUPPLEMENTAL		
NOTE: The responsible agency(ies) will provide information	CHECK APPROPRATE BLOCK	
I – PRIVATE CORPORATIONS	ATTACHED	FILED*
a. Articles of Incorporation	☐	☐
b. Corporation Bylaws	☐	☐
c. A certification from the State showing the corporation is in good standing and is entitled to operate within the State	☐	☐
d. Copy of resolution authorizing filing	☐	☐
e. The name and address of each shareholder owning 3 percent or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote and the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate.	☐	☐
f. If application is for an oil or gas pipeline, describe any related right- of-way or temporary use permit applications, and identify previous applications.	☐	☐
g. If application is for an oil and gas pipeline, identify all Federal lands by agency impacted by proposal.	☐	☐
II – PUBLIC CORPORATIONS		
a. Copy of law forming corporation	☐	☐
b. Proof of organization	☐	☐
c. Copy of Bylaws	☐	☐
d. Copy of resolution authorizing filing	☐	☐
e. If application is for an oil or gas pipeline, provide information required by item “I – f” and “I – g” above.	☐	☐
III – PARTNERSHIP OR OTHER UNINCORPORATED ENTITY		
a. Articles of association, if any	☐	☐
b. If one partner is authorized to sign, resolution authorizing action is	☐	☐
c. Name and address of each participant, partner, association, or other	☐	☐
d. If application is for an oil or gas pipeline, provide information required by item “I – f” and “I – g” above.	☐	☐

*If the required information is already filed with the agency processing this application and is current, check block entitled “Filed.” Provide the file identification information *(e.g., number, date, code, name)*. If not on file or current, attach the requested information.

NOTICES

Note: This applies to the Department of Agriculture/Forest Service (FS)

This information is needed by the Forest Service to evaluate the requests to use National Forest System lands and manage those lands to protect natural resources, administer the use, and ensure public health and safety. This information is required to obtain or retain a benefit. The authority for that requirement is provided by the Organic Act of 1897 and the Federal Land Policy and Management Act of 1976, which authorize the secretary of Agriculture to promulgate rules and regulations for authorizing and managing National Forest System lands. These statutes, along with the Term Permit Act, National Forest Ski Area Permit Act, Granger-Thye Act, Mineral Leasing Act, Alaska Term Permit Act, Act of September 3, 1954, Wilderness Act, National Forest Roads and Trails Act, Act of November 16, 1973, Archeological Resources Protection Act, and Alaska National Interest Lands Conservation Act, authorize the Secretary of Agriculture to issue authorizations or the use and occupancy of National Forest System lands. The Secretary of Agriculture's regulations at 36 CFR Part 251, Subpart B, establish procedures for issuing those authorizations.

BURDEN AND NONDISCRIMINATION STATEMENTS

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

BUREAU OF RECLAMATION

PACIFIC NORTHWEST REGION

UPPER SNAKE FIELD OFFICE

470 22nd Street

Heyburn, ID 83336

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Bennett Mountain, Notch Butte,

and

Cotterel (Albion) Communication Sites

Plan of Development

May 2014

RECLAMATION

Managing Water in the West

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1. INTRODUCTION

This document includes the plan of development (POD) for the proposed Bureau of Reclamation (Reclamation) Bennett Mountain, Notch Butte, and Cotterel (Albion) communication sites. The proposed communication sites would be located on public lands administered by the Bureau of Land Management (BLM). This POD is being submitted with one Application for Transportation and Utility Systems and Facilities on Federal Lands (SF299) to the BLM Boise and Twin Falls District Offices as each proposed communication site is located within the jurisdiction of a different field Office.

Location	BLM Field Office	District Office
Bennett Mountain	Four Rivers	Boise
Notch Butte	Shoshone	Twin Falls
Cotterel	Burley	Twin Falls

The project will provide a benefit or special service to the general public or to a program of the Secretary of Interior by improving the level of security of Federal telecommunications facilities pursuant to critical infrastructure protection requirements. It will also improve the telecommunication reliability for monitoring and controlling both Reclamation and Bonneville Power Administration (BPA) facilities. Reclamation is working with BPA to address Reclamation's conversion to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operations; both agencies' requirements for critical infrastructure protection; and BPA's 10-year communication plan to construct an improved microwave backbone system from eastern Idaho to the Boise area.

Reclamation and BPA will be sharing resources and bandwidth capacity at each communication site. Reclamation will be the lead for acquiring the required authorizations for the communication sites on Doe Point (United States Forest Service, being applied for under separate application), Bennett Mountain (BLM), and Notch Butte (BLM). BPA currently has an authorized communication site on Cotterel which they concur to allow Reclamation to co-locate within. Therefore, Reclamation will also need to acquire an authorization from BLM for the Cotterel site.

2. PURPOSE AND NEED OF THE FACILITIES

As mandated by regulation, these facilities are considered critical infrastructure and the protection of such facilities with their security and operational systems are paramount to Reclamation meeting its fiduciary responsibilities.

Reclamation's Snake River Area Office manages 25 dams and reservoirs with a total active capacity of approximately 6.8 million acre-feet, providing water to 83,000 farmers and more than 30,000 farms. Five power plants provide 821,571 megawatt hours of electricity annually. The Middle Snake Field Office manages the dams and projects from eastern Oregon to King Hill, and the Upper Snake

Field Office manages the area from King Hill to western Wyoming. Reclamation's conversion to the SCADA system will allow for monitoring and controlling facility-related operations by gathering data at each facility and then sending the information to a central computer system. Reclamations Black Canyon Control Center will centrally operate the system.

BPA's operational telecommunications are used for the control, protection, monitoring, operation, dispatch, construction, and maintenance of the power transmission system and to ensure its safe, reliable, and efficient operation during normal and emergency power system conditions. Therefore, the location of certain communication sites is critical to meeting such conditions. Successful operation and coordination of this highly complex power transmission system is only possible through a dedicated, highly reliable, BPA operated and maintained telecommunications system.

The improved microwave communication system will be designed to meet all current reliability standards and provide increased system capacity which is necessary to comply with increased security/operational requirements. In order to complete the communication link between the Black Canyon Control Center (located at the Black Canyon Diversion Dam) and facilities located in eastern Idaho and to improve the microwave backbone; new microwave communications site must be developed on Bennett Mountain and Notch Butte and additional equipment installed on Cotterel. Due to the proprietary nature of the operations of the facilities and need to comply with requirements for critical infrastructure protection Reclamation will not be able to co-locate in any existing facilities, other than with BPA on Cotterel, nor allow for future co-location.

Bennett Mountain – Reclamation is currently a tenant in Intermountain Communications of Southern Idaho's facility, located just south of the old BLM fire lookout on privately owned land (Double Anchor Ranches Inc.) on Bennett Mountain. Reclamation has a need to comply with requirements for critical infrastructure protection and install additional microwave radios and dishes; therefore, a new communication site is proposed. For this location there are two proposed sites. Location 1 is located at the existing BLM communication site; location 2 is at the site of the old BLM lookout. Access to either site would be via the existing road. Commercial power would need to be brought to either location. Reclamation has been coordinating with Idaho Power regarding options for locating the power distribution line. Idaho Power will apply for a right-of-way for the power distribution line under separation application. The following table depicts what facilities needed by Reclamation exist and what new improvements would be needed at the new communication site for either location.

Location 1 – BLM Communication Site	
Facilities	**Specifications**
Compound Site	Existing: Approx. 0.113 acres
Building	Existing: 1-12 ft. x 18 ft. (equipment), 1-12 ft. x 12 ft. (generator) pre-cast concrete; New: 1-12 ft. x 20 ft. (equipment) pre-cast concrete (CXT)
Tower	Existing: 100 ft. 3-legged self-standing galvanized with platforms; concrete tower leg pads; grounding for tower

	pads; If the existing tower does not meet the wind load requirements for the additional microwave dishes a new tower would be required. New: 100 ft. 4-legged self-standing galvanized with platforms; approx. 30 ft. x 30 ft. x 6 ft. concrete tower pad; grounding for tower pad
Dishes	New : 1-6 ft. diameter, 2-8 ft. diameter, and 2-10 ft. diameter high performance microwave dishes, grey in color
Power	New: Single-phase (Idaho Power Co.)
Emergency Power	Existing: 30 kW Generator; Existing: 250 Gallon Propane Tank
Security	Existing: 8 ft. tall chain-link fence with barbed top

Location 2 – BLM Old Lookout Site	
Facilities	**Specifications**
Compound Site	Approx. 90 ft. x 90 ft.
Building	New: 1-12 ft. x 20 ft. (equipment), 1-12 ft. x 14 ft. (generator), pre-cast concrete (CXT)
Tower	New: 100 ft. 4-legged self-standing galvanized with platforms; approx. 30 ft. x 30 ft. x 6 ft. concrete tower pad; grounding for tower pad
Dishes	New : 1-6 ft. diameter, 2-8 ft. diameter, and 2-10 ft. diameter high performance microwave dishes, grey in color
Power	New: Single-phase (Idaho Power Co.)
Emergency Power	New: 40 kW Generator, 1000 Gallon Propane Tank
Security	New: 8 ft. tall chain-link fence with barbed top

Notch Butte – Neither Reclamation nor BPA currently have a site on Notch Butte; therefore, a new site would be necessary in order to comply with required critical infrastructure protection and to install the necessary microwave radios and dishes. The BLM Notch Butte Communications Site Management Plan currently limits the size of microwave dishes allowed within the area to 8 feet in diameter. For Reclamation and BPA's communication needs, 10-foot diameter dishes are required. Reclamation formally requests BLM to consider amending the Notch Butte Communications Site Management Plan to allow the larger diameter microwave dishes in addition to their review and consideration of the proposed communication site application. Access to the site would be via the existing road. The following table depicts what facilities would be needed at the new communication site.

Facilities	**Specifications**
Compound Site	Approx. 90 ft. x 90 ft.
Building	1-12 ft. x 20 ft. (equipment), 1-12 ft. x 14 ft. (generator), pre-cast concrete (CXT)
Tower	100 ft. 4-legged self-standing galvanized with platforms;

	approx. 30 ft. x 30 ft. x 6 ft. concrete tower pad; grounding for tower pad
Dishes	4-10 ft. diameter high performance microwave dishes, grey in color
Power	Single-phase
Emergency Power	40 kW Generator, 1000 Gallon Propane Tank
Security	8 ft. tall chain-link fence with barbed top

Cotterel (Albion) Mountain – BPA currently holds a right-of-way grant (IDI-0-16828) for a 50 ft. x 75 ft. communication site, including access, on Cotterel. Reclamation would co-locate within BPA's existing site and install additional microwave radios and dishes. Access to the site would be via the existing road. The following table depicts what facilities exist and what new improvements would be needed at the new communication site.

Facilities	Specifications
Compound Site	Existing: 50 ft. x 75 ft.
Building	Existing: 1-12 ft. x 20 ft., 1-10 ft. x 18 ft. metal
Tower	Existing: 80 ft. tower
Dishes	New: 4-10 ft. diameter high performance microwave dishes, grey in color
Power	Existing: Single-phase
Emergency Power	Existing: Generator, 3-1000 Gallon Propane Tanks with 18 ft. x 22 ft. ice bridge over the top; New: None
Security	Existing: 21 ft. x 22 ft. x 7 ft. chain-link fence with barbed top

3. Right-of-Way Locations

Bennett Mountain – The proposed communication site would be located in Elmore County, Idaho on public lands administered by the BLM Four Rivers Field Office. For this location there are two proposed locations on the top of Bennett Mountain. Location 1 is located at the existing BLM communication site; location 2 is located at the site of the old BLM fire lookout. Both locations would utilize the existing access road. Maps of the proposed locations are included in Appendix A.

Location	Legal Description
Location 1	Boise Meridian, Elmore County, Idaho, T. 2 S., R. 8 E., Section 24: A portion of the SW¼NE¼.
Location 2	Boise Meridian, Elmore County, Idaho, T. 2 S., R. 9 E., Section 18: A portion of the NW¼SW¼.

Access Road (includes the private lands)	Boise Meridian, Elmore County, Idaho T. 1 S., R. 8 E., Section 36: A portion of the SE¼SW¼, a portion of the W½SE, a portion of the SE¼SE¼; T. 2 S., R. 8 E., Section 1: A portion of the SE¼NE¼, a portion of the E½SE¼, A portion of Lot 1; Section 12: A portion of the NE¼NE¼; Section 12: A portion of the NE¼NE¼; Section 13: A portion of the SE¼SE¼; Section 24: A portion of the N½NE¼, a portion of the SW¼NE¼; T. 2 S., R. 9 E., Section 7: A portion of the SE¼NW¼, a portion of the E½SW¼, a portion of the SW¼SE¼, a portion of Lot 1, a portion of Lot 2; Section 18: A portion of the W½NE¼, a portion of the SE¼NE¼, a portion of the SE¼NW¼, a portion of the E½SW¼, a portion of Lot 4.

Notch Butte – The proposed communication site would be located in Lincoln County, Idaho on public lands administered by the BLM Shoshone Field Office on Notch Butte. The proposed location is located between the Idaho Bureau of Homeland Security site and the existing stock water tank. Access would be via the existing road. Maps of the proposed location are included in Appendix B.

Location	Legal Description
Notch Butte	Boise Meridian, Lincoln County, Idaho, T. 6 S., R. 17 E., Section 22: A portion of the NE¼SE¼.
Access Road	Boise Meridian, Lincoln County, Idaho T. 6 S., R. 17 E., Section 22: A portion of the SE¼NW¼, a portion of the NE¼SW¼, a. portion of the N½SE¼.

Cotterel Mountain – The proposed communications authorization would be located in Cassia County, Idaho on public lands administered by the BLM Burley Field Office on Cotterel Mountain. Reclamation would co-locate within BPA's existing site. Access would be via the existing road. Maps of the proposed location are included in Appendix C.

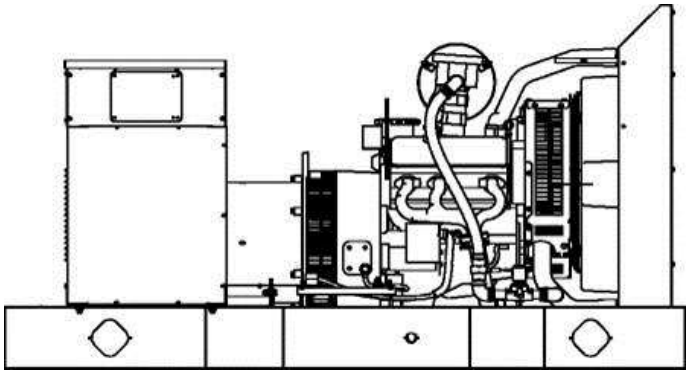
Location	Legal Description
BPA Site	Boise Meridian, Cassia County, Idaho, T. 12 S., R. 26 E.,

	Section 19: A portion of the NE¼SE¼.
Access Road (includes the state and private lands)	Boise Meridian, Cassia County, Idaho T. 12 S., R. 25 E., Section 25: A portion of the SE¼NE¼, a portion of the SE¼SW¼, a portion of the W½SE¼; Section 35: A portion of the SE¼NE¼, a portion of the E½SE¼, a portion of the SW¼SE¼; Section 36: A portion of the N½NW, a portion of the SW¼NW¼; T. 12 S., R. 26 E., Section 19: A portion of the NE¼SE¼, a portion of the S½SE¼; Section 30: A portion of the W½NE¼, a portion of the SE¼NW¼, a portion of Lot 2.

The following photos/drawings are those of a typical pre-cast communication site building, generator, and tower. However, at this time specific manufacturer, model, and specifications have not been determined for the proposed Reclamation communication sites.

CXT Pre-Cast Building

Kohler Generator



Valmont Self-Supporting Tower

4. Facility Design Factors

All facilities would be built in accordance with all applicable Federal, State and local requirements, including the Motorola R56 standards (most recent edition) and National Electrical Safety Code. No conflicts with other regional telecommunication or radio towers are anticipated. The table below depicts the requested right-of-way areas, as well as temporary use areas for each proposed communication site.

Location	Right-of-Way Areas	Temporary Use Areas
Bennett Mountain	*Location 1:* Communication Site: Approx. 0.113 acres Access: 30 ft. x 6.8 miles *Location 2:* Communication Site: 90 ft. x 90 ft. Access: 30 ft. x 6.8 miles	*Location 1:* Additional Area: 170 ft. x 170 ft. *Location 2:* Additional Area: 170 ft. x 170 ft.
Notch Butte	Communication Site: 90 ft. x 90 ft. Access: 50 ft. x 3,895 ft.	Additional Area: 170 ft. x 170 ft.

Cotterel	Communication Site: 50 ft. x 75 ft. Access: 30 ft. x 3.3 miles	None

5. Additional Components

Reclamation is proposing to install towers with a current height of 100 ft.; however, the towers would be designed to be able to be extended to 150 ft. if the need arises in the future. Access to all proposed communication sites will be via the existing access roads, no new roads are necessary. Commercial power is needed for the Bennett Mountain location. Reclamation has been coordinating with Idaho Power regarding options for locating the power distribution line. Idaho Power will apply for a right-of-way for the power distribution line under separation application.

6. Government Agencies Involved

The communication sites will be built in accordance with applicable county, state, and federal requirements. Reclamation and BPA are coordinating with one another on the entire project. Reclamation has filed applications with the BLM (Boise and Twin Falls Districts) and the Boise National Forest, Mountain Home Ranger Districts for new communication sites/leases that are part of the effort to comply with the required critical infrastructure protection and an improved microwave communication backbone system from eastern Idaho to the Boise area.

7. Construction of the Facilities

Bennett Mountain – For Location 1, an area measuring 12 ft. x 20 ft. would be compacted gravel to fit the dimensions of the pre-cast equipment building. Reclamation would utilize BLM's existing generator and propane tank. The needed microwave dishes would be installed on the existing tower. However, if the existing tower does not meet the wind load requirements a new 100 ft. 4-legged, self-supporting tower would be necessary. The new tower would be installed according to manufacturer recommendations with 30 ft. x 30 ft. x 6 ft. concrete tower pad for the base of the steel tower. Additional disturbance would be associated with the installation of commercial power to the site; which, would be applied for under separate application from Idaho Power.

For Location 2, the existing structures of the old BLM lookout would need to be razed and removed from the site. An area measuring 12 ft. x 20 ft. would be compacted gravel to fit the dimensions of the pre-cast equipment building. The tower would be installed according to manufacturer recommendations with 30 ft. x 30 ft. x 6 ft. concrete tower pad for the base of the steel 100 ft. tower. The needed microwave dishes would be installed on the tower. A second building 12 ft. x 14 ft. would be installed to house a 40 kW generator for emergency power. A 1000 gallon propane tank would be installed next to this building to fuel the generator. Additional disturbance would be associated with the installation of commercial power to the site as described for Location 1. This

location would also include the installation of an 8 ft. chain-link fence with barbed wire around the site.

Notch Butte – A site area of approximately 100 ft. x 100 ft. would be excavated, compacted, and level. An area, within the overall site, measuring 12 ft. x 20 ft. would be compacted gravel to fit the dimensions of the pre-cast equipment building. The tower would be installed according to manufacturer recommendations with 30 ft. x 30 ft. x 6 ft. concrete tower pad for the base of the steel 100 ft. tower. The needed microwave dishes would be installed on the tower. A second building 12 ft. x 14 ft. would be installed to house a 40 kW generator for emergency power. A 1000 gallon propane tank would be installed next to this building to fuel the generator. Additional disturbance would be associated with the extension of commercial power from the Notch Butte Communication Site junction to Reclamations proposed site. This extension would be buried. This location would also include the installation of an 8 ft. chain-link fence with barbed wire around the 90 ft. x 90 ft. site.

Cotterel (Albion) Mountain – No construction would be necessary at this location as all required buildings and tower exist. The needed microwave dishes would be installed on the existing tower.

8. Resource Values and Environmental Concerns

No impacts are anticipated to the following resources:

- Areas of Critical Environmental Concern;
- Environmental Justice;
- Farmlands (Prime or Unique);
- Floodplains;
- Geology/Mineral Resources;
- Lands With Wilderness Characteristics;
- Paleontological resources;
- Water Quality;
- Wetland/Riparian Zones;
- Wild and Scenic Rivers; and
- Wilderness or Wilderness Study Areas.

Anticipated impacts to the following resources are addressed below.

Air Quality

Short-term land disturbance associated with the construction of the Bennett Mountain and Notch Butte communication sites and powerlines would result in increased fugitive dust emissions.

Cultural Resources

Areas proposed for disturbance either have been or would be surveyed for cultural resources prior to their disturbance. If cultural resources are located and if impacts to these resources are determined to occur, they would be mitigated through avoidance or as directed by the BLM.

Human Health and Safety

Increased security and improved communications between Reclamation's facilities and the Black Canyon Control Center as well as BPA's improved communications would also increase the level of safety for the public.

Non-Native and Invasive Species

Impacts related to non-native and invasive species as related to the proposed communication sites include increased potential spread of non-native invasive species into disturbed areas. Indirect impacts include a decrease in native plant communities with an increase in competition from noxious weeds and invasive species. Reclamation would work with the BLM and the appropriate Cooperative Weed Management Area to prevent the spread of non-native, invasive species in the area. Employees and contractors would be educated to identify weeds that could occur in the area disturbed. Should invasive weeds be identified, Reclamation would take appropriate measures to prevent their spread.

Reclamation would follow best management practices (BMPs) in order to prevent the spread of invasive weeds in the areas of the proposed communication sites. BMPs include the following:

- Surveying the proposed disturbance area prior to construction to determine if non-native, invasive weeds already exist;
- Flagging areas of concern to prevent employees/contractors from driving through a stand of listed noxious weeds;
- Using a BLM-recommended seed mix to reduce invasive species over time by developing and maintaining desired plant communities; and
- Washing down construction equipment in accordance with the BLM standard operating procedures to prevent the transfer of noxious and undesirable weed seed from other areas.

Rangeland

Impacts to rangeland include loss of available area for forage due to the communication site construction and fencing. The proposed Bennett Mountain locations are within the East Bennett Mountain grazing allotment; Notch Butte location is within the Camp 1 grazing allotment; and Cotterel is within the South Cotterel grazing allotment. However, no additional land at the Cotterel location would be impacted.

Recreation

Impacts to recreation include a change in the area available for dispersed recreation as the communication sites would be fenced for security purposes. However, no additional land at the Cotterel location would be impacted.

Soils

There is the potential for topsoil change or loss due to land disturbing activities. The area identified for the communication sites would be cleared, leveled and compacted with gravel in preparation for the installation of the pre-cast buildings, towers, tower pads, and propane tanks. However, no additional impacts to soils would occur at the Cotterel location.

Vegetation Including Special Status Species

Direct impacts to vegetation will include the removal of vegetation. Indirect impacts to vegetation will include increased potential for non-native invasive species establishment. Other indirect impacts include the short-term loss of forage and cover for wildlife, increased foraging pressures on adjacent areas, and a potential increase of the erosion potential to soils which could further affect adjacent vegetated areas. During all vegetation clearing activities, Reclamation would ensure that they don't degrade the soil surface to the level where there would be an added risk of erosion or increase in the establishment or expansion of non-native, invasive species. However, no additional land or vegetation at the Cotterel location would be impacted.

Visual Resources

Impacts to visual resources include changes in line, form, color, and texture resulting from the clearing of vegetation and facility construction. The greatest majority of impacts would last until restoration occurs, the structures are removed, and natural vegetation has re-established in disturbed areas. Until then, line, form, color, and texture changes will be apparent with altered vegetation communities. However, these changes in line, form, color and texture are considered minimal in comparison to the existing level with respect to the existing infrastructure associated with the existing communication sites.

Wastes (Hazardous or solid)

Diesel fuel, grease, petroleum oil, propane, and solvents may be utilized as part of the proposed activities in conjunction with equipment operation. The use of approved staging facilities, safety measures, transportation, and handling requirements would be utilized for the communication sites. Construction, operation, and maintenance activities would comply with applicable Federal, State, and local laws and regulations regarding the use of hazardous substances. Totally enclosed containment would be provided for all hazardous materials (if needed) and trash. All construction waste including trash, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials would be removed to a disposal facility authorized to accept such materials.

Wildlife Including Special Status Species and Migratory Birds

Impacts to wildlife including special status species and migratory birds include loss of habitat, potential injury and mortality from increased traffic, human disturbance and installed improvements. The proposed towers could potentially create roosting sites for predatory birds. Construction activities would be timed to avoid harm to migratory birds during the nesting season (dates may vary from location to location, but generally from March 1 through July 31), or until occupied nests are no longer active. If construction activities are unavoidable during this breeding season, Reclamation would submit a request for a variance to BLM.

9. Stabilization and Rehabilitation

Restoration and Revegetation

Any necessary restoration/revegetation of the temporary use areas as a result of construction activities would be conducted as soon as weather and ground conditions permit. The primary objective of revegetation efforts is to reduce the spread of non-native, invasive species, reduce soil erosion, provide forage for wildlife and livestock, and reduce visual impacts. In some cases, restoration/revegetation activities may not be necessary, given the limited amount of soil compaction, and surrounding land uses, conditions, and vegetation.

The seed mix used for any restoration/ revegetation project is to be determined in consultation with the BLM. All seed used must meet all of the requirements of the Federal Seed Act and applicable Idaho state laws. Only seed certified as "noxious weed-free" can be used, and must be appropriate to the geographic and elevation characteristics of the area to be seeded. The best time to seed is in the fall. If fall seeding cannot be done, spring seeding would be conducted, as conditions dictate. The seed would be applied during the optimal period following the completion of construction. The seed mix would be broadcast on the disturbed area, after seedbed preparations are complete. After broadcasting, the seed would be lightly harrowed or raked into the ground. Seeding would not take place when wind velocities exceed that which would allow a uniform application of the seed mix.

10. Operation and Maintenance

Operation and maintenance of the facilities would be conducted by Reclamation and BPA.
Public access to the communication sites would be restricted by the 8 ft. chain-link fences. The sites would be accessible for most of the year, with access limitation depending on seasonal snow and mud.

Emergency Notification Procedures - Fire

If Reclamation becomes aware of an emergency situation that is caused by a fire on or threatening BLM lands and that could damage the communication sites or their operation, they will notify the following appropriate BLM contact:

- Southwest Idaho – Boise Dispatch Center. 208-384-3400
- South Central Idaho – Twin Falls Dispatch Center. 208-886-7633

Likewise, if the BLM becomes aware of an emergency situation that is caused by a fire on or threatening BLM lands and that could damage the communication sites or their operation, they will notify the appropriate Reclamation contact (see Appendix D).

11. Termination and Restoration

If Reclamation determines that the communication site rights-of-way are no longer needed then at least 120 days prior to termination of the authorizations, Reclamation would contact the BLM to

arrange a joint inspection of the communication sites. The inspection would be held to agree to an acceptable termination and rehabilitation plan. The plan would include removal of facilities, restoration, and seeding. However, there may also be the opportunity for the facilities to remain and be offered to a new occupant.

12. POD ACCEPTANCE

The following authorized representatives of the BLM and Reclamation have accepted this POD:

BLM: Four Rivers Field Office

By: _____
(Signature)
Name: _____
Title: Field Manager
Date: _____

BLM: Shoshone Field Office

By: _____
(Signature)
Name: _____
Title: Field Manager
Date: _____

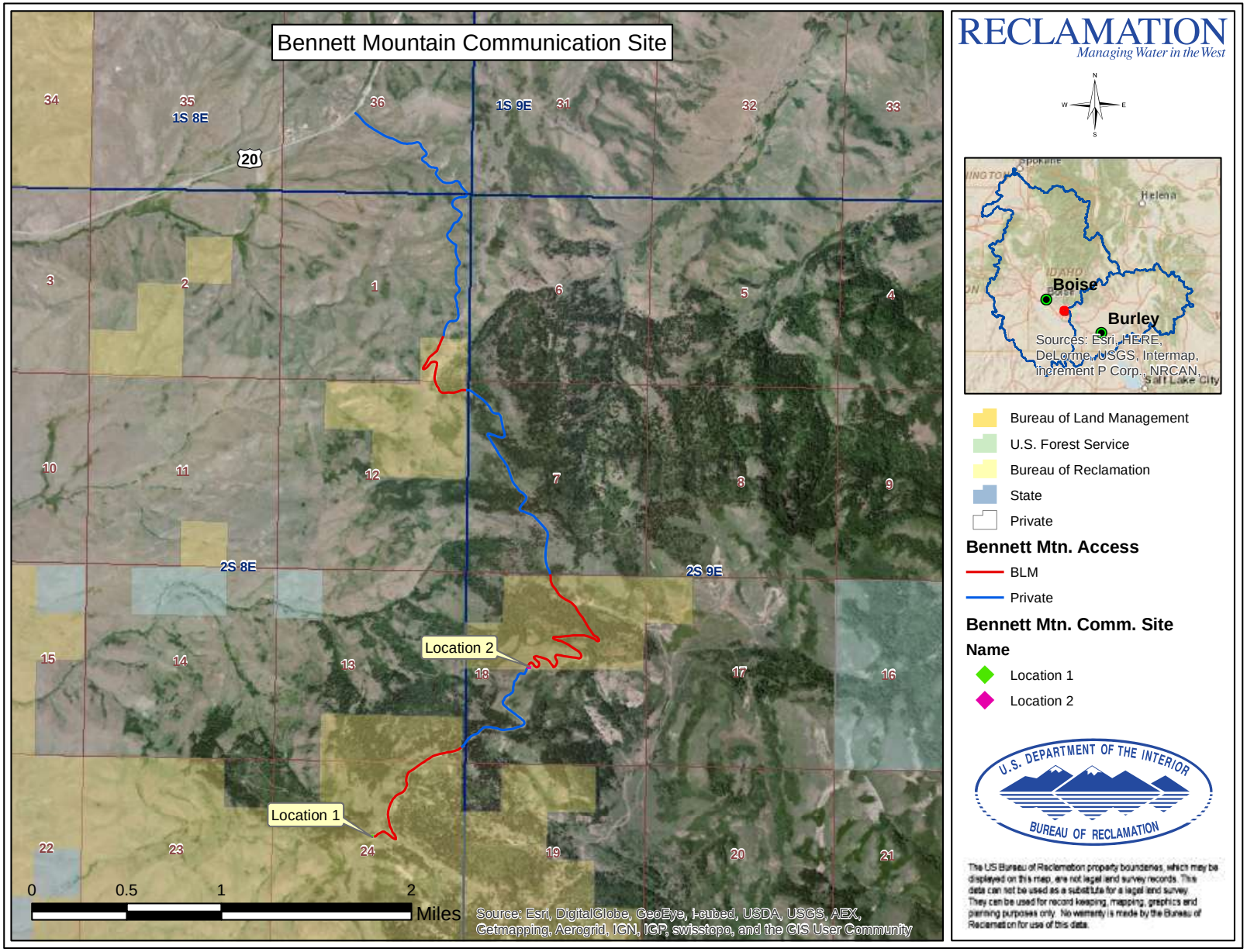
BLM: Burley Field Office

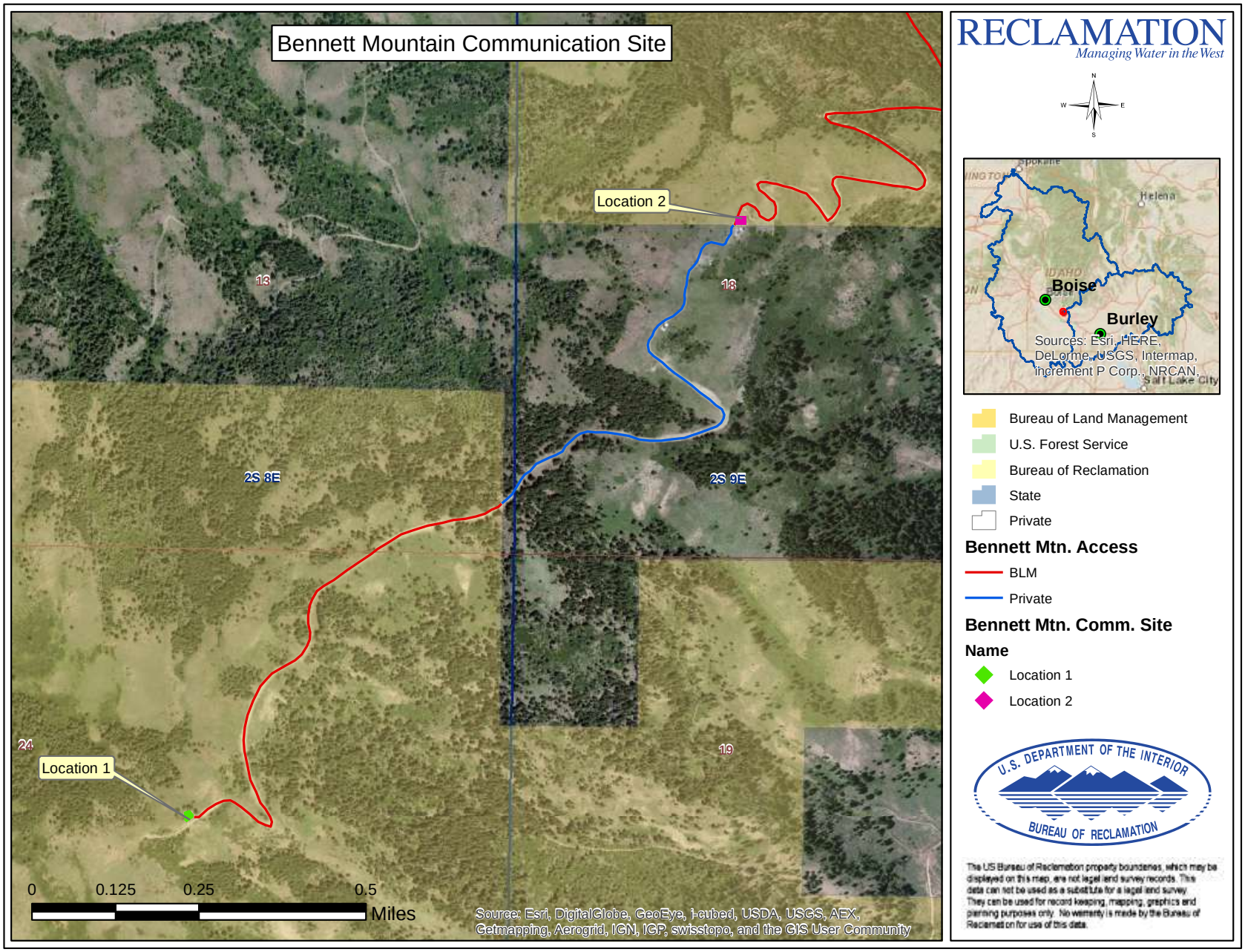
By: _____
(Signature)
Name: _____
Title: Field Manager
Date: _____

Reclamation: Snake River Area Office

By: Jerrold D. Gregg
(Signature)
Name: Jerrold D. Gregg
Title: Area Manager
Date: 6/5/2014

APPENDIX A – BENNETT MOUNTAIN




Bennett Mountain Communication Site
Location 2
Location 1
13
18
2S 8E
2S 9E
24
19
0
0.125
0.25
0.5
Miles
Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
RECLAMATION
Managing Water in the West
N
W
E
S
Helena
Boise
Burley
Salt Lake City
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN
Bureau of Land Management
U.S. Forest Service
Bureau of Reclamation
State
Private
Bennett Mtn. Access
BLM
Private
Bennett Mtn. Comm. Site
Name
Location 1
Location 2
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
The US Bureau of Reclamation property boundaries, which may be displayed on this map, are not legal land survey records. This data can not be used as a substitute for a legal land survey. They can be used for record keeping, mapping, graphics and planning purposes only. No warranty is made by the Bureau of Reclamation for use of this data.

Location 1

If BLM's tower will support Reclamations dish needs and requirements, place Reclamations electronics bldg. on the north side of existing tower. If BLM's tower will not support Reclamations dish needs, replace tower or construct 2nd tower on north side of lot. 1- 12' x 20' (electronics); If needed, 1 – 100' 4-legged self-supporting galvanized steel tower.
Electronics Bldg.
Tower, if necessary
Generator Bldg. w/ Propane Tank Outside
Google earth

Location 2

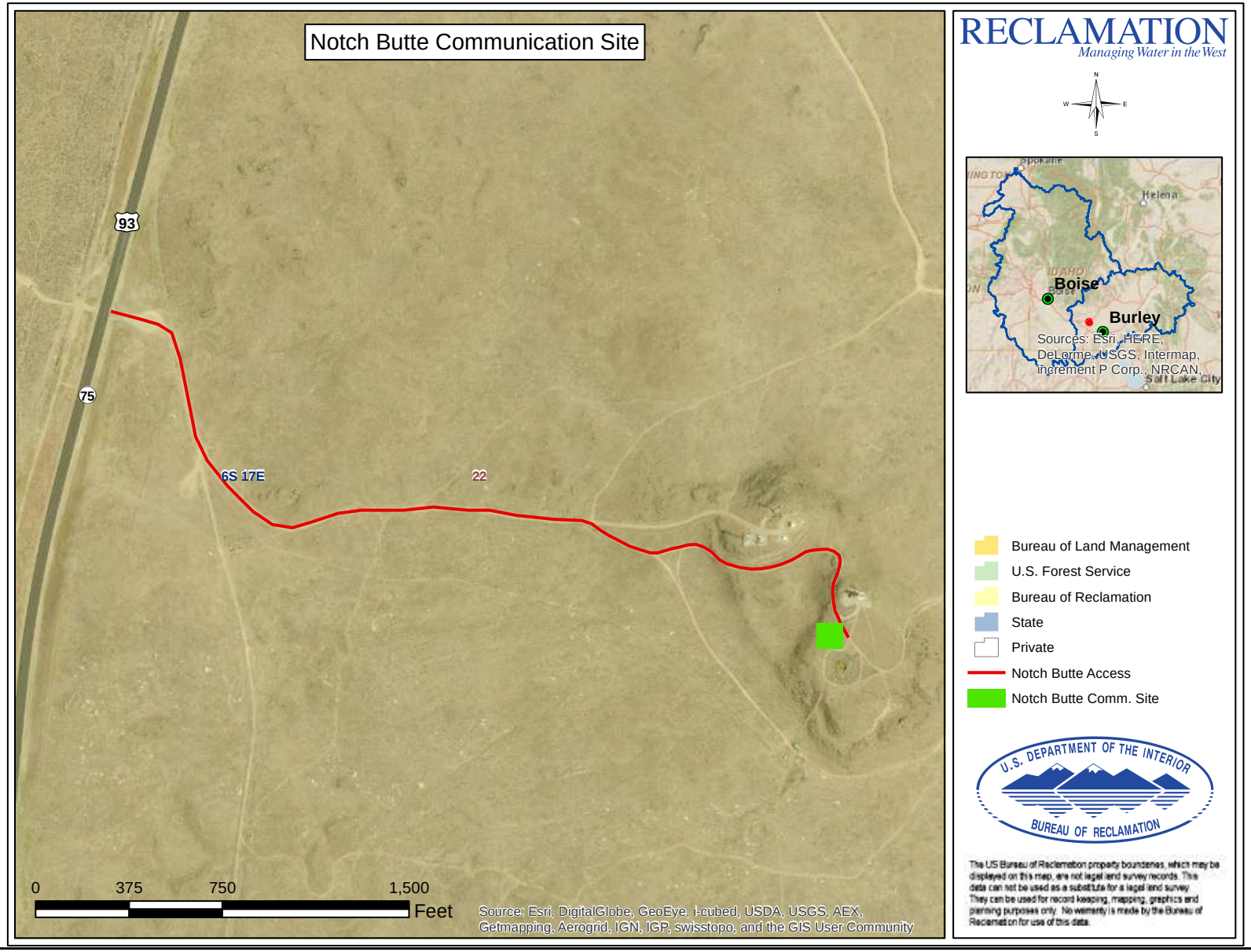
BLM Generator Bldg.
BLM Propane Tank
BLM Misc. Bldg.
BLM Old Lookout Bldg.
Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

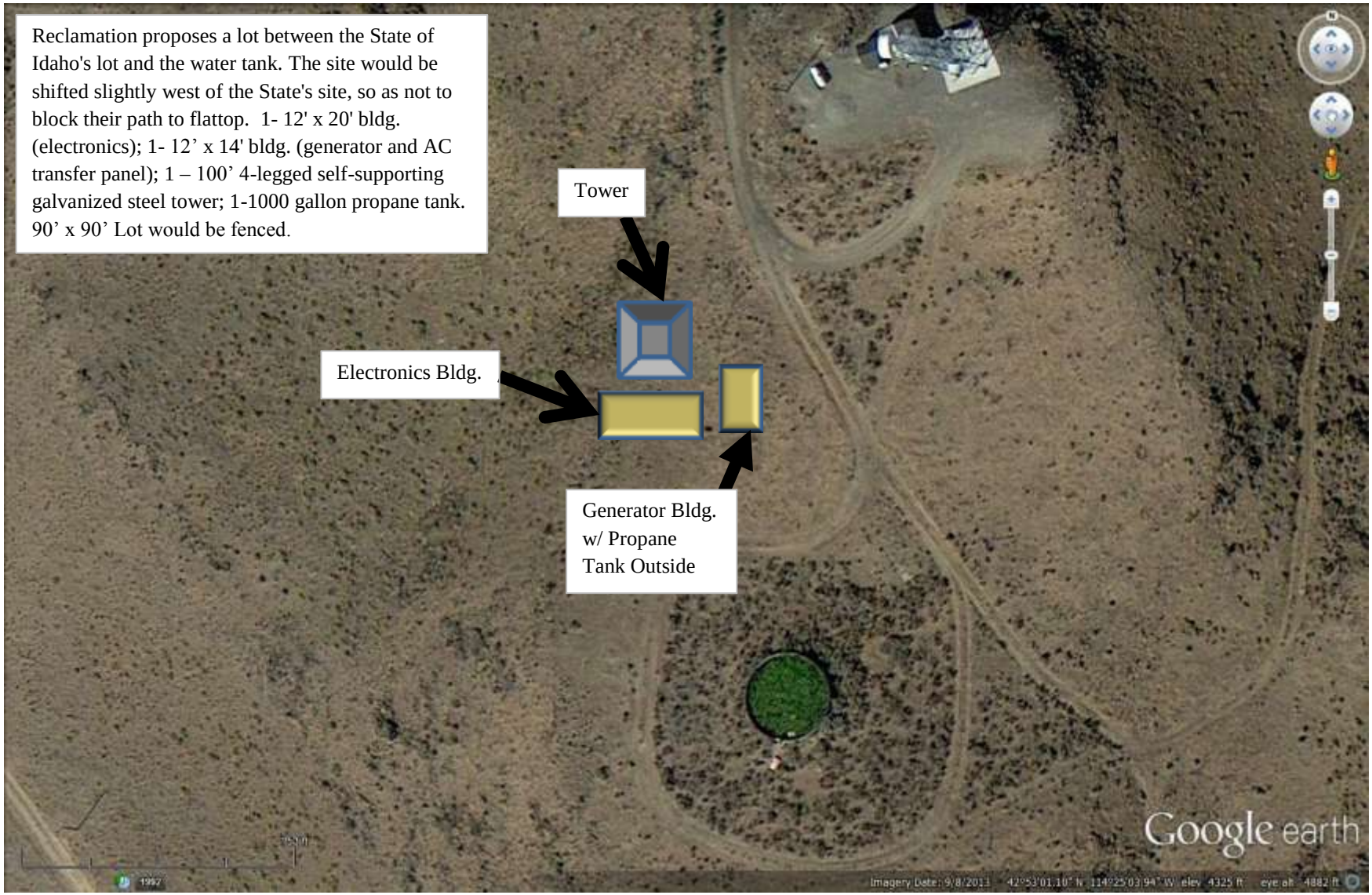
Tower
Generator Bldg.
w/ Propane Tank
Outside
Electronics Bldg.
Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX,
Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Bennett Mountain Technical Data Reports

Removed due to proprietary purposes.

APPENDIX B – NOTCH BUTTE

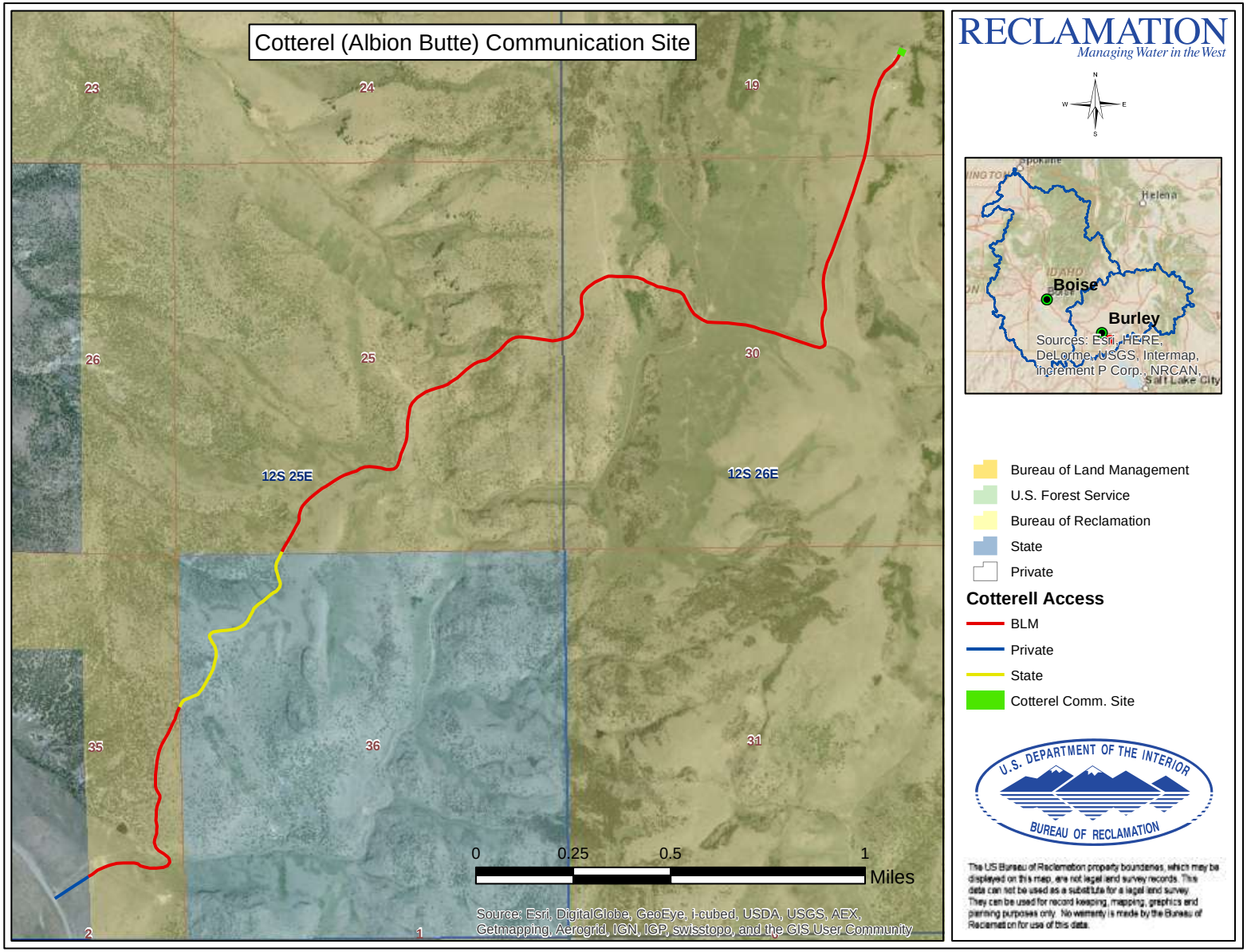


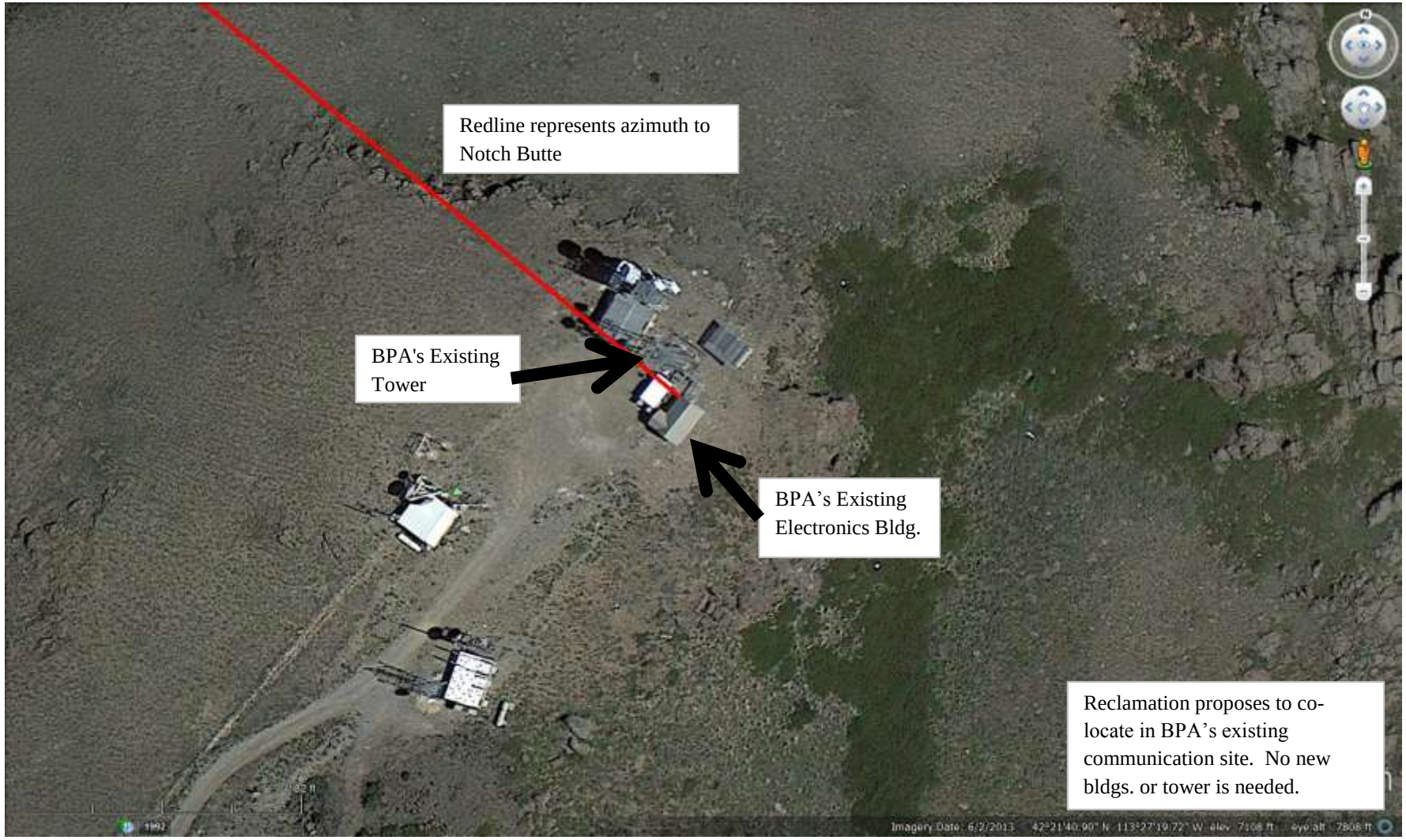

Reclamation proposes a lot between the State of Idaho's lot and the water tank. The site would be shifted slightly west of the State's site, so as not to block their path to flattop. 1- 12' x 20' bldg. (electronics); 1- 12' x 14' bldg. (generator and AC transfer panel); 1 – 100' 4-legged self-supporting galvanized steel tower; 1-1000 gallon propane tank. 90' x 90' Lot would be fenced.
Tower
Electronics Bldg.
Generator Bldg. w/ Propane Tank Outside
Google earth

Notch Butte Technical Data Report

Removed due to proprietary purposes.

APPENDIX C – COTTEREL




Redline represents azimuth to Notch Butte
BPA's Existing Tower
BPA's Existing Electronics Bldg.
Reclamation proposes to co-locate in BPA's existing communication site. No new bldgs. or tower is needed.

Cotterel Technical Data Report

Removed due to proprietary purposes.

APPENDIX D – CONTACT INFORMATION

Contact information for key personnel (May 2014)

Role	Contact Information
BLM – Burley Field Office	
Emergency Contacts	
Fire Reporting & Management	(800) 974-2373 – South Idaho Interagency Dispatch Center
Hazmat Reporting	(208) 732-7414 – Tom Askew
Law Enforcement	(208) 735-2352 – BLM Law Enforcement Officer
Administrative Contacts	
General	(208) 677-6600 – Burley Field Office
Grant Application & Administration	(208) 677-6640 – Jennifer Sonner, Realty Specialist
BLM – Four Rivers Field Office	
Emergency Contacts	
Fire Reporting & Management	(208) 384-3400 – Boise Interagency Dispatch Center
Hazmat Reporting	(208) 384-3433/(208) 850-6356 – Carrie Wontorcik
Law Enforcement	(208) 384-3333/(208) 559-7459 – Stan Buchannan
Administrative Contacts	
General	(208) 384-3300 – Four Rivers Field Office
Grant Application & Administration	(208) 384-3348 – Jeremy Bluma, Realty Specialist
BLM – Shoshone Field Office	
Emergency Contacts	
Fire Reporting & Management	(800) 974-2373 – South Idaho Interagency Dispatch Center
Hazmat Reporting	(208) 732-7414 – Tom Askew
Law Enforcement	(208) 735-2352 – BLM Law Enforcement Officer
Administrative Contacts	
General	(208) 732-7200 – Shoshone Field Office
Grant Application & Administration	(208) 732-7204 – Kasey Prestwich, Realty Specialist
Reclamation	
Emergency Contact	(208) 365-2600 - Black Canyon Control Center
Administrative Contacts	
General Operation & Maintenance	(208) 365-2600 - Black Canyon Facility Office (208) 365-2600 ext. 30 - Steve Coulter, M.S.F.O. Facility Manager (208) 365-2600 ext. 18 - Brent Jensen, Supervisor Powerplant Maint. (208) 365-2600 ext. 29 - John Parker, C&I Mechanic Work Leader
Grant Application & Administration	(208) 378-5034 - John Tiedeman, Project Manager (208) 678-0461 ext. 22 - Jami Andersen, Assistant Project Manager (208) 678-0461 ext. 31 - Tara Hagen, Realty Specialist

United States Department of the Interior

BUREAU OF RECLAMATION
Snake River Area Office
Upper Snake Field Office
470 22nd Street
Heyburn, ID 83336

DEC 16 2014

IN REPLY REFER TO:

USF-6310
LND-3.00

CERTIFIED – RETURN RECEIPT REQUESTED

MEMORANDUM

To: Boise District Manager, Bureau of Land Management
Mr. James Fincher,

From: Jerrald D. Gregg JERROLD D. GREGG
Snake River Area Manager

Subject: Right-of-Way Application for Bennett Mountain, Notch Butte and Cotterel (Albion) Communication Sites

The Bureau of Reclamation (Reclamation) submitted an application for a new communication site located on Bennett Mountain to address Reclamation's conversion to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operations, requirements for critical infrastructure protection (no co-locating ability other than with the Bonneville Power Administration), and to construct an improved microwave backbone system from eastern Idaho to the Boise area through an application package dated June 5, 2014. The application included two locations for Bennett Mountain: Location 1 is located at the existing BLM communication site; Location 2 is at the site of the old BLM lookout. A location map is enclosed for reference.

Reclamation formally amends our application by dropping Location 1 and only requesting consideration of Location 2. The availability of power at the location is a major factor in the development of this facility.

Reclamation estimates needing a minimum load of about 17,325 watts for the proposed facility, based on the equipment and their associated power demands. A single-phase 240 volt A.C. at 200 amp service should suffice. Reclamation has initiated discussions with D2B, LLC, owner of the existing power line at Location 2, regarding potential use of the line to service the proposed communication site.

Reclamation would like to schedule a meeting with you and your staff as soon as possible to further discuss the processing of our application as well as Reclamation's willingness to cooperate with the BLM in completing any required environmental studies and compliance with the National Environmental Policy Act of 1969, as amended.

Please contact Tara Hagen, Realty Specialist, at (208) 678-0461 extension. 31 to schedule a meeting or if you have any questions.

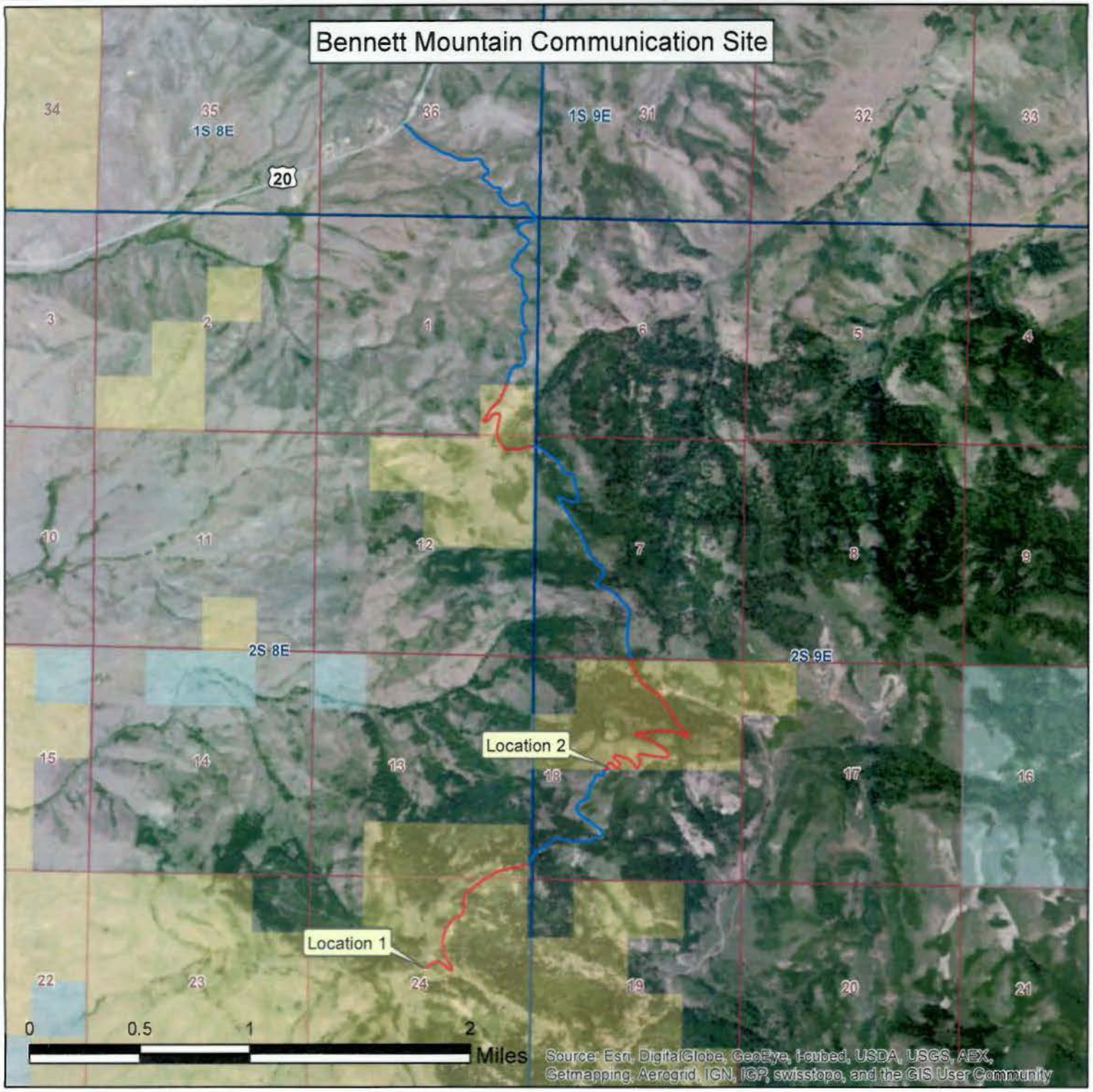
Enclosure (1)

1. Bennett Mountain Project Location Map

bc: PN-3824 (Tiedeman), PN-1030 (Kent), PN-3900 (Wake), PN-3909 (Tarrant)
SRA-1000 (Gregg),
USF-2000 (Springer), USF-2100 (Andersen), USF-6300 (Boyer)

WBR:THagen:acenarrusa:12/03/2014:208-678-0461xt31:USF-6310
T:\1-LETTERS\6310 (Hagen)\12.03.14 AC
BLM_Fincher_Amend_Application_Ltr_12.3.2014.docx

Bennett Mountain Communication Site



RECLAMATION
Managing Water in the West

- Bureau of Land Management
- U.S. Forest Service
- Bureau of Reclamation
- State
- Private

Bennett Mtn. Access

- BLM
- Private

Bennett Mtn. Comm. Site

Name

- Location 1
- Location 2

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

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United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:

USF-6310
LND-6.00

MEMORANDUM

To: Burley Field Manager, Bureau of Land Management
Attention: Ken Crane

From: Roland K. Springer
Area Manager

JAN 0 6 2016

Subject: Right-of-Way Application for Cotterel Communications Site

On June 5, 2014, the Bureau of Reclamation transmitted to Ms. June Shoemaker, Acting Bureau of Land Management (BLM) Twin Falls District Manager, an application to co-locate within Bonneville Power Administration's (BPA) communication facility at the BLM designated Cotterel Communications Site. As a result of additional studies, Reclamation has determined that the type and number of improvements to be added to BPA's tower have changed from those included in the application. Therefore, Reclamation is formally amending our application to depict the following improvements to be located on BPA's tower: two VHF antennas, one 6-foot diameter high performance gray microwave dish, and two 10-foot high performance gray microwave dishes.

Please contact Tara Hagen, Realty Specialist, at (208) 678-0461 ext. 31 if you have any questions or concerns.

Appendix B – Scoping Letter and Responses

USF - 6310
LND 6.00

Interested Parties (See Enclosed List)

Dear Ladies and Gentleman:

The Bureau of Land Management (BLM) has received applications from the Bureau of Reclamation (Reclamation) requesting authorization to locate microwave communication facilities on Bennett Mountain and Notch Butte. This letter is to inform you of the proposal and to solicit comments you may have regarding the proposal. Enclosed is a Scoping Information Package describing Reclamation's proposal.

Scoping is a public involvement process used to help determine the issues to be addressed related to a proposed action. An analysis of the proposal will be conducted through an environmental assessment and is anticipated to be complete sometime within the summer of 2015. Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action that meet the purpose of and need for the project.

Decision to be Made
Upon completion of the environmental assessment, BLM will issue decisions authorizing or rejecting Reclamation's applications.

Public Input Needed
Comments are specifically requested on the proposed action and preliminary alternatives. Comments made on this proposal would be most helpful if they are received by May 6, 2015 and are directly relevant to the proposal and locations. The BLM will not reject public feedback outside established public involvement timeframes; however, these comments may be considered secondary to comments received in a timely manner and may only be assessed to determine if they identify concerns that would substantially alter the assumptions, proposal, design, or analysis presented in the environmental assessment. Written comments must be submitted to:

Bureau of Land Management
Jeremy Bluma, Realty Specialist
3948 South Development Avenue
Boise, ID 83705-5339.

The office business hours for submitting hand-delivered comments are 8:00 AM – 4:00 PM Monday through Friday, excluding holidays. Electronic comments must be submitted in a

format such as an email message, plain text (.txt), rich text format (.rtf), Word (.doc or .docx), or portable document format (.pdf) to jbluma@blm.gov. E-mails submitted to e-mail addresses other than the one listed, in other formats than those listed, or containing viruses will be rejected. To be most helpful, comments sent electronically should include the title of this project in the subject line. Please identify whether you are submitting comments as an individual or as the designated spokesperson on behalf of an organization. Issues that are outside the scope of the proposal will not be addressed at this planning level.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

The primary contact for questions and comments for this analysis is Jeremy Bluma, Realty Specialist, (208) 384-3348.

Sincerely,

Jim Fincher
District Manager

Enclosures - 2:

1. Interested Parties Mailing List
2. Scoping Information Package - Bureau of Reclamation Communication Sites

Interested Parties Mailing List

Bureau of Land Management
Boise District Office
3948 Development Ave
Boise, ID 83705

Bureau of Land Management
Shoshone Field Office
400 W F Street
Shoshone, ID 83352

Bureau of Reclamation
Upper Snake Field Office
470 22nd St
Heyburn, ID 83336

Bureau of Reclamation
Snake River Area Office
230 Collins Rd
Boise, ID 83702

Mountain Home Air Force Base
336th Gunfighter Ave, Ste 314
Mountain Home AFB, ID 83648

U. S. Fish and Wildlife Services
1387 S Vinnell Way
Boise, ID 83709

United States Forest Service
Mountain Home District
Stephaney Church
3080 Industrial Way
Mountain Home, ID 83647

Idaho Air & Army National Guard
4040 W Guard St
Boise, ID 83702

Idaho Bureau of Homeland Security
PO Box 83720
Boise, ID 83720

Idaho Department of Administration
650 W State St
Boise, ID 83720-0089

Idaho Department of Agriculture
PO Box 790
Boise, ID 83701

Idaho Department of Fish and Game
Magic Valley Region
324 S 417 E, Ste 1
Jerome, ID 83338

Idaho Department of Fish and Game
Southwest Region
3101 S Powerline RD
Nampa, ID 83686

Idaho Department of Lands
Jerome Field Office
324 S 417 E, Ste 2
Jerome, ID 83338

Idaho Department of Lands
Southwest Supervisory Area
8355 State St
Boise, ID 83714

Idaho Farm Bureau Federation
PO Box 167
Boise, ID 83701

Ada County Commissioners
200 W Front St, 3rd Floor
Boise, ID 83702-5960

Elmore County Commissioners
150 S 4th E, Ste 302
Mountain Home, ID 83647-3097

Lincoln County Commissioners
111 W B St, Ste C
Shoshone, ID 83352

City of Boise
Mayor David Bieter
PO Box 500
Boise, ID 83701

JD Aldecoa & Sons Inc
4312 Edgemont
Boise, ID 83706

Barber/Caven Ranches
Jim Chambers
6874 Fairview Ave
Boise, ID 83704

Mary & Paul Bartruel
3335 N Morrow Rd
Glenns Ferry, ID 83623

Broken Circle Cattle Co
Ted Hoffman
600 N Broken Circle Dr
Mountain Home, ID 83647

Casa Del Norte LP
11204 N Bar 21 Dr
Glenns Ferry, ID 83623

Cresent Moon Ranches LLC
6874 Fairview Ave
Boise, ID 83704

Double Anchor Ranch
Lynn & Elsie Riggs
5714 Double Anchor Dr
Glenns Ferry, ID 83623

Gilbert Gree
2512 E Garber Dr
Meridian, ID 83702

Grazing Board
Resource Area Representative
Stan Boyd
PO Box 2596
Boise, ID 83701

High Desert Coalition Incorporated
Ted Hoffman, President
220 Elmcrest St
Mountain Home, ID 83647

Idaho Power Co
PO Box 70
Boise, ID 83707

Lloyd Knight DVM
PO Box 47
Hammett, ID 83624-0047

Land Trust of Treasure Valley
PO Box 106
Boise, ID 83701

MKR LLC
1112 Oakley Ave
Burley, ID 83318

Samuel & Carol Lee Blackwell
5486 Winter Camp Lane
Glenns Ferry, ID 83623

CableOne
PO Box 1946
Twin Falls, ID 83301

Committee For Idaho's High Desert
Pam Marcum
PO Box 2863
Boise, ID 83701

D2B LLC
Jeff Berger
115 E 6th S
Mountain Home, ID 83647

Faulkner Land & Livestock
John Faulkner
1989 S 1875 E
Gooding, ID 83330

Golden Eagle Audubon
PO Box 8261
Boise, ID 83707

Half Moon LLC
Joyce Wurderlick Peason
6874 Fairview Ave
Boise, ID 83704

Idaho Conservation League
PO Box 844
Boise, ID 83701

Idaho Wildlife Federation
PO Box 6426
Boise, ID 83707

Land & Water Fund
Laird Lucas
PO Box 1612
Boise, ID 83701

LG Davison & Sons Inc
1969 Prairie Rd
Mountain Home, ID 83647

Nature Conservancy
950 W Bannock, Ste 210
Boise, ID 83702

Betty Ann & Nick Nettleton
18542 Wilson Rd
Glenns Ferry, ID 83623

Oneida Farms
372A N 400 E
Jerome, ID 83338

George L Presley
6688 E Montgomery Rd
King Hill, ID 83633

Resolution Advocates
Doug McConnaughey
405 Creekside Place
Nampa, ID 83686

SBA Towers II LLC
5900 Broken Sound Parkway NW
Bocaraton, FL 33487

Syringa Network LLC
12301 W Explorer Dr, Ste 200
Boise, ID 83713

The Wilderness Society
950 W Bannock St, Ste 605
Boise, ID 83702

Verizon Wireless
180 Washington Valley Rd
Bedminster, NJ 07921-2120

Western Watersheds Project
PO Box 1770
Hailey, ID 83333

Wool Growers Association
Stan Boyd
802 W Bannock St, Ste 205
Boise, ID 83702

New Cingular Wireless
12555 Cingular Way, Ste 1300
Alpharetta, GA 30004

Davie E Owen Jr
Skip Owen
1959 S E Ross Rd
Glenns Ferry, ID 83623

Qwest Corp
CenturyLink CQ
Jeff Lawrey
1205 NE 64th St, Rm 401
Seattle WA 98115

Dr. Neil Rimbey
1904 E Chicago, Stes A & B
Caldwell, ID 83605

Sierra Club
Middle Snake Group
PO Box 552
Boise, ID 83701

TFI
Tom & Scott Nicholson
PO Box 690
Meridian, ID 83680

Tree Top Ranch LP
Larry Williams
PO Box 8126
Boise, ID 83707

John & Cindy Walker
4775 E Montgomery Rd
King Hill, ID 83633

Wildland Defense
Katie Fite
PO Box 125
Boise, ID 83701

USF-6310
LND 6.00

Honorable C.L. “Butch” Otter
Office of the Governor
State Capital
PO Box 83720
Boise, ID 83720

Subject: Bureau of Reclamation Microwave Communication Facilities

Dear Governor Otter:

The Bureau of Land Management (BLM) has received applications from the Bureau of Reclamation (Reclamation) requesting authorization to locate microwave communication facilities on Bennett Mountain and Notch Butte. This letter is to inform you of the proposal and to solicit comments you may have regarding the proposal. Enclosed is a Scoping Information Package describing Reclamation’s proposal.

Scoping is a public involvement process used to help determine the issues to be addressed related to a proposed action. An analysis of the proposal will be conducted through an environmental assessment and is anticipated to be complete sometime within the summer of 2015. Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action that meet the purpose of and need for the project.

Decision to be Made
Upon completion of the environmental assessment, BLM will issue decisions authorizing or rejecting Reclamation’s applications.

Public Input Needed
Comments are specifically requested on the proposed action and preliminary alternatives. Comments made on this proposal would be most helpful if they are received by May 6, 2015 and are directly relevant to the proposal and locations. The BLM will not reject public feedback outside established public involvement timeframes; however, these comments may be considered secondary to comments received in a timely manner and may only be assessed to determine if they identify concerns that would substantially alter the assumptions, proposal, design, or analysis presented in the environmental assessment. Written comments must be submitted to:

Bureau of Land Management
Jeremy Bluma, Realty Specialist
3948 South Development Avenue
Boise, ID 83705-5339.

The office business hours for submitting hand-delivered comments are 8:00 AM – 4:00 PM Monday through Friday, excluding holidays. Electronic comments must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), Word (.doc or .docx), or portable document format (.pdf) to jbluma@blm.gov. E-mails submitted to e-mail addresses other than the one listed, in other formats than those listed, or containing viruses will be rejected. To be most helpful, comments sent electronically should include the title of this project in the subject line. Please identify whether you are submitting comments as an individual or as the designated spokesperson on behalf of an organization. Issues that are outside the scope of the proposal will not be addressed at this planning level.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

The primary contact for questions and comments for this analysis is Jeremy Bluma, Realty Specialist, (208) 384-3348.

Sincerely,

Jim Fincher
District Manager

Enclosures - 2:
1. Scoping Information Package - Bureau of Reclamation Communication Sites

Identical Letter Sent To:

Honorable Mike Crapo
United States Senate
251 E Front St, Ste 205
Boise, ID 83702

Honorable Mike Simpson
United States House of Representatives
802 W Bannock St, Ste 600
Boise, ID 83702

Honorable Jim Risch
United States Senate
350 N 9th St, Ste 302
Boise, ID 83702

Honorable Brad Little
Office of the Lieutenant Governor
State Capital
PO Box 83720
Boise, ID 83720

United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

MAR 30 2015

IN REPLY REFER TO:

SRA-1208
PRJ-28.00

Honorable Lindsey Manning
Chairman
Shoshone-Paiute Tribes
P.O. Box 219
Owyhee, NV 89832

Subject: Request for Comments Regarding a Bureau of Reclamation Proposal to Locate Microwave Communication Facilities at Bennett Mountain and Notch Butte, Idaho

Dear Mr. Chairman:

The Bureau of Reclamation is applying to the Bureau of Land Management's (BLM) Four Rivers and Shoshone Field Offices for authorization to locate microwave communication facilities on Bennett Mountain and Notch Butte. The purpose of this letter is to inform interested and affected Tribal public of the proposal and to solicit comments pursuant to the National Environmental Policy Act of 1969. Enclosed is a Scoping Information Package describing Reclamation's proposal.

Scoping is a public involvement process used to help determine the issues to be addressed related to a proposed action. An analysis of the proposal will be conducted through an environmental assessment and is anticipated to be complete sometime within the summer of 2015. Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action that meet the purpose of and need for the project.

Decision to be Made

Upon completion of the environmental assessment, BLM will issue decisions authorizing or rejecting Reclamation's applications.

Input Needed

Comments are specifically requested on the proposed action, preliminary issues and preliminary alternatives. Please help us identify important issues and concerns by sending your comments by **May 6, 2015**. Written comments are submitted to:

Mr. Richard Jackson
Natural Resource Specialist
Bureau of Reclamation
230 Collins Road
Boise, ID 83702-4520

The office business hours for submitting hand-delivered comments are 8:00 a.m. – 4:00 p.m. Monday through Friday, excluding holidays. Electronic comments should be submitted in a format such as an e-mail message, plain text (.txt), rich text format (.rtf), Word (.doc or .docx), or portable document format (.pdf) to rjackson@usbr.gov. E-mails submitted to e-mail addresses other than the one listed, in other formats than those listed, or containing viruses will be rejected. To be most helpful, comments sent electronically should include the title of this project in the subject line. Issues that are outside the scope of the proposal will not be addressed at this planning level.

If you would like to meet and discuss this project further, please contact Ms. Allyn Meuleman at gmeuleman@usbr.gov, 208-383-2258, or mail your request to:

Ms. Allyn Meuleman
Native American Affairs Coordinator
Bureau of Reclamation
230 Collins Road
Boise, ID 83702-4520

The primary contact for questions and comments for this analysis is Mr. Richard Jackson, Natural Resource Specialist, at 208-383-2285.

Sincerely,

Jerrold D. Gregg
Area Manager

Enclosure: Scoping Information Package - Bureau of Reclamation Communication Sites

United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

MAR 30 2015

IN REPLY REFER TO:

SRA-1208
PRJ-28.00

Honorable Jason Walker
Chairman
Northwestern Shoshone Tribe
505 Pershing Ave., Suite 200
Pocatello, ID 83201

Subject: Request for Comments Regarding a Bureau of Reclamation Proposal to Locate Microwave Communication Facilities at Bennett Mountain and Notch Butte, Idaho

Dear Mr. Chairman:

The Bureau of Reclamation is applying to the Bureau of Land Management's (BLM) Four Rivers and Shoshone Field Offices for authorization to locate microwave communication facilities on Bennett Mountain and Notch Butte. The purpose of this letter is to inform interested and affected Tribal public of the proposal and to solicit comments pursuant to the National Environmental Policy Act of 1969. Enclosed is a Scoping Information Package describing Reclamation's proposal.

Scoping is a public involvement process used to help determine the issues to be addressed related to a proposed action. An analysis of the proposal will be conducted through an environmental assessment and is anticipated to be complete sometime within the summer of 2015. Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action that meet the purpose of and need for the project.

Decision to be Made

Upon completion of the environmental assessment, BLM will issue decisions authorizing or rejecting Reclamation's applications.

Input Needed

Comments are specifically requested on the proposed action, preliminary issues and preliminary alternatives. Please help us identify important issues and concerns by sending your comments by **May 6, 2015**. Written comments are submitted to:

Mr. Richard Jackson
Natural Resource Specialist
Bureau of Reclamation
230 Collins Road
Boise, ID 83702-4520

The office business hours for submitting hand-delivered comments are 8:00 a.m. – 4:00 p.m. Monday through Friday, excluding holidays. Electronic comments should be submitted in a format such as an e-mail message, plain text (.txt), rich text format (.rtf), Word (.doc or .docx), or portable document format (.pdf) to rjackson@usbr.gov. E-mails submitted to e-mail addresses other than the one listed, in other formats than those listed, or containing viruses will be rejected. To be most helpful, comments sent electronically should include the title of this project in the subject line. Issues that are outside the scope of the proposal will not be addressed at this planning level.

If you would like to meet and discuss this project further, please contact Ms. Allyn Meuleman at gmeuleman@usbr.gov, 208-383-2258, or mail your request to:

Ms. Allyn Meuleman
Native American Affairs Coordinator
Bureau of Reclamation
230 Collins Road
Boise, ID 83702-4520

The primary contact for questions and comments for this analysis is Mr. Richard Jackson, Natural Resource Specialist, at 208-383-2285.

Sincerely,

Jerrold D. Gregg
Area Manager

Enclosure: Scoping Information Package - Bureau of Reclamation Communication Sites

United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

MAR 30 2015

IN REPLY REFER TO:

SRA-1208
PRJ-28.00

Honorable Charlotte Rodrique
Chairperson
Burns Paiute General Council
100 Pasigo Street
Burns, OR 97720-9303

Subject: Request for Comments Regarding a Bureau of Reclamation Proposal to Locate Microwave Communication Facilities at Bennett Mountain and Notch Butte, Idaho

Dear Chairperson:

The Bureau of Reclamation is applying to the Bureau of Land Management's (BLM) Four Rivers and Shoshone Field Offices for authorization to locate microwave communication facilities on Bennett Mountain and Notch Butte. The purpose of this letter is to inform interested and affected Tribal public of the proposal and to solicit comments pursuant to the National Environmental Policy Act of 1969. Enclosed is a Scoping Information Package describing Reclamation's proposal.

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Boise, ID 83702-4520

The primary contact for questions and comments for this analysis is Mr. Richard Jackson, Natural Resource Specialist, at 208-383-2285.

Sincerely,

Jerrold D. Gregg
Area Manager

Enclosure: Scoping Information Package - Bureau of Reclamation Communication Sites

United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:

MAR 30 2015

SRA-1208
PRJ-28.00

Honorable Nathan Small
Chairman
Shoshone-Bannock Tribal Council
P.O. Box 306 Pima Drive
Fort Hall, ID 83203-0306

Subject: Request for Comments Regarding a Bureau of Reclamation Proposal to Locate Microwave Communication Facilities at Bennett Mountain and Notch Butte, Idaho

Nathan

Dear Mr. Chairman:

The Bureau of Reclamation is applying to the Bureau of Land Management's (BLM) Four Rivers and Shoshone Field Offices for authorization to locate microwave communication facilities on Bennett Mountain and Notch Butte. The purpose of this letter is to inform interested and affected Tribal public of the proposal and to solicit comments pursuant to the National Environmental Policy Act of 1969. Enclosed is a Scoping Information Package describing Reclamation's proposal.

Scoping is a public involvement process used to help determine the issues to be addressed related to a proposed action. An analysis of the proposal will be conducted through an environmental assessment and is anticipated to be complete sometime within the summer of 2015. Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action that meet the purpose of and need for the project.

Decision to be Made

Upon completion of the environmental assessment, BLM will issue decisions authorizing or rejecting Reclamation's applications.

Input Needed

Comments are specifically requested on the proposed action, preliminary issues and preliminary alternatives. Please help us identify important issues and concerns by sending your comments by **May 6, 2015**. Written comments are submitted to:

Mr. Richard Jackson
Natural Resource Specialist
Bureau of Reclamation
230 Collins Road
Boise, ID 83702-4520

The office business hours for submitting hand-delivered comments are 8:00 a.m. – 4:00 p.m. Monday through Friday, excluding holidays. Electronic comments should be submitted in a format such as an

e-mail message, plain text (.txt), rich text format (.rtf), Word (.doc or .docx), or portable document format (.pdf) to rjackson@usbr.gov. E-mails submitted to e-mail addresses other than the one listed, in other formats than those listed, or containing viruses will be rejected. To be most helpful, comments sent electronically should include the title of this project in the subject line. Issues that are outside the scope of the proposal will not be addressed at this planning level.

If you would like to meet and discuss this project further, please contact Ms. Allyn Meuleman at gmeuleman@usbr.gov, 208-383-2258, or mail your request to:

Ms. Allyn Meuleman
Native American Affairs Coordinator
Bureau of Reclamation
230 Collins Road
Boise, ID 83702-4520

The primary contact for questions and comments for this analysis is Mr. Richard Jackson, Natural Resource Specialist, at 208-383-2285.

Sincerely,

Jerrold D. Gregg
Area Manager

Enclosure: Scoping Information Package - Bureau of Reclamation Communication Sites

cc: Mr. Wes Jones
Emergency Manager
Shoshone-Bannock Tribes
P.O. Box 306 Pima Drive
Fort Hall, ID 83203-0306

Mr. Cleve Davis
Environmental Program Manager
Shoshone-Bannock Tribes
P.O. Box 306 Pima Drive
Fort Hall, ID 83203-0306

Mr. Chad Colter
Fish and Wildlife Director
Shoshone-Bannock Tribes
P.O. Box 306 Pima Drive
Fort Hall, ID 83203-0306

Scoping Information Package

Bureau of Reclamation Communication Sites

INTRODUCTION

This information package summarizes a proposal from the Bureau of Reclamation (Reclamation) for authorization to locate microwave communication facilities at the Bureau of Land Management (BLM) Bennett Mountain and Notch Butte designated communication sites and to locate additional equipment at Reclamation office locations. Federal actions must be analyzed in accordance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations to determine potential environmental consequences.

PURPOSE AND NEED FOR ACTION

The BLM's purpose and need is to respond to Reclamation's applications for communication facilities to be located on public lands managed by the BLM. BLM processes applications for communication facilities pursuant to Title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.) and the Telecommunications Act of 1996 (47 U.S.C. 332). Section 704(c) of the Telecommunications Act requires Federal agencies to facilitate the development and placement of telecommunications equipment on buildings and land they manage when placement does not conflict with the agency's mission or current or planned use of the property.

Reclamation's purpose and need is to convert to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operations; compliance with requirements for critical infrastructure protection and reliability pursuant to the North American Electric Reliability Corporation (NERC) standards; and to coordinate with the Bonneville Power Administration (BPA) to construct an improved microwave system from eastern Idaho to the Boise area.

Reclamation's proposed communication facilities and additional equipment would improve the microwave communication system and reliability for monitoring and controlling both Reclamation and BPA facilities. Reclamation and BPA will be sharing resources and bandwidth capacity at both the Bennett Mountain and Notch Butte facilities.

In order to complete the communication link between the Black Canyon Control Center (located at the Black Canyon Diversion Dam) and Reclamation and BPA facilities located in eastern Idaho, new microwave communication facilities must be developed on Bennett Mountain (BLM) and Notch Butte (BLM) as well as new equipment installed at Reclamation's Pacific Northwest Regional Office, Snake River Area Office and Upper Snake Field Office. Due to the proprietary nature of the operations of the facilities and need to comply with requirements for critical infrastructure protection Reclamation will not be able to co-locate in any facilities at the aforementioned locations.

PROPOSED ACTION

Reclamation proposes to access, locate, operate and maintain microwave communication facilities on public lands on Bennett Mountain and Notch Butte, as well as to locate additional equipment at Reclamation's Pacific Northwest Regional Office, Snake River Area Office and

Upper Snake Field Office. All facilities and equipment would be constructed/installed in accordance with all applicable Federal, State and local requirements, including the Motorola R56 standards (most recent edition) and National Electrical Safety Code. No conflicts with other telecommunication or radio towers are anticipated.

Bennett Mountain – Reclamation is currently a tenant in a privately owned communication facility located on privately owned land on Bennett Mountain. Due to Reclamation's need to comply with requirements for critical infrastructure protection and install additional microwave radios and dishes a new federally-owned facility is proposed. The proposed location for this facility is the site of the BLM fire lookout on the following described public land:

Boise Meridian, Elmore County, Idaho,
T. 2 S., R. 9 E.,
Section 18: A portion of the NW¼SW¼.

The proposed location of the facility and existing access route is depicted on Exhibit A – Bennett Mountain Location Map.

The existing BLM fire lookout structures (cinder block building, two small ancillary buildings, poles, etc.) would be dismantled, removed from the site, and properly disposed of. A 40-foot x 25-foot area would be leveled and compacted with gravel to fit the dimensions of the proposed concrete block equipment building. The building would be prefabricated or built on-site. An area approximately 18-feet wide x 18-feet long x 3-feet deep would be excavated for the tower base, followed by the placement of concrete forms, wrapping and placement of rebar, and installation of ground wires. Concrete would then be placed and finished. Once the concrete has cured a 100-foot tall, 4-legged self-standing galvanized steel tower (with platforms) would be installed on the base. The following high performance microwave dishes, grey in color, would be installed on the tower at locations necessary to accommodate the needed communication paths: one 6-foot diameter, two 8-foot diameter, and two 10 foot diameter. An ice bridge would be installed connecting the tower and building. Commercial power would be provided to the facility with a buried powerline from a transformer located on adjacent private lands. Back-up emergency power would be provided by a 40 kW generator fueled by either two 500-gallon propane tanks or one 1000-gallon tank. The communication facility (tower, building, and propane tank) would be fenced with 8-foot chain-link with barbed wire at the top. A temporary construction area measuring approximately 170 feet x 170 feet would be needed during construction of the facility. All construction waste including trash, litter, garbage, and other solid waste would be removed to a disposal facility authorized to accept such material. Overall ground disturbance is estimated to be less than one (1) acre.

Access to the proposed communication facility would be via existing roads. Once construction of the proposed facility is completed, Reclamation anticipates accessing the site 3-5 times a year for maintenance. Emergency access would be conducted as necessary. The facility would be accessed by truck during the snow-free season and if required during the snow season, a snow cat would be utilized.

Notch Butte – Neither Reclamation nor BPA currently have a communication facility on Notch Butte. Due to Reclamation's need to comply with requirements for critical infrastructure protection and installation of microwave radios and dishes co-location is not an option, a new federally-owned facility is proposed. The proposed location for this facility is on the following described public land:

Boise Meridian, Lincoln County, Idaho,
T. 6 S., R. 17 E.,
Section 22: A portion of the NE¼SE¼.

The proposed location of the facility and existing access is depicted on Exhibit B – Notch Butte Location Map.

Construction of the communication facility and access would be similar as that described for Bennett Mountain. Dismantling and removal of existing BLM fire lookout structures would not be necessary; four 10-foot high performance microwave dishes would be installed on the tower, and commercial power would be provided with a powerline extended from a point identified by Idaho Power located within the BLM designated Notch Butte Communications Site.

The BLM Notch Butte Communications Site Management Plan limits the size of microwave dishes to 8-feet in diameter. For Reclamation and BPA's communication needs, 10-foot diameter dishes are required. The Notch Butte Communications Site Management Plan would be amended to allow the larger sized microwave dishes.

Reclamation's Pacific Northwest Regional Office, Snake River Area Office and Upper Snake Field Office **–** Additional microwave equipment would be installed at the following Reclamation office locations in order to complete the communication links to the Black Canyon Control Center.

Pacific Northwest Regional Office:

1150 North Curtis Road, Suite 100
Boise, Idaho 83706-1234

Snake River Area Office:

230 Collins Road
Boise, Idaho 83702

Upper Snake Field Office:

470 22nd Street
Heyburn, Idaho 83336

EXISTING CONDITION

Bennett Mountain **–** The BLM designated Bennett Mountain Communication Site is located approximately 28 miles northeast of Mountain Home, Idaho on Federal land administered by the BLM. The Bennett Mountain region is a mix of approximately 50% federally owned and 50% privately owned land. The area is generally characterized as a mountainous sage brush steppe environment. The terrain has moderately steep slopes. The north and west slopes are typically covered with more dense vegetation comprised of a chaparral, conifer and deciduous tree complex, depending on aspect, slope, and location.

Notch Butte **–** The Notch Butte Communication Site is located approximately 4 miles south of Shoshone, Idaho on Federal land administered by the BLM. The general area is comprised of a slightly rolling topography with scattered basalt rock outcrops in a sage brush steppe environment. The area around the communication site has been burned in the past and reseeded with a BLM approved seed mix.

Reclamation's Pacific Northwest Regional Office, Snake River Area Office and Upper Snake Field Office – Reclamation's Pacific Northwest Regional and Snake River Area Office's are located in Boise, Idaho in an urban setting. The Upper Snake River Field Office is located within Heyburn, Idaho in a rural setting.

PRELIMINARY ALTERNATIVE DEVELOPMENT

The environmental assessment will include consideration of the Proposed Action Alternative and the No Action alternative, which includes denial of Reclamation's applications for identified communication facilities to be located on Federal lands. Additional alternatives will be developed commensurate with the identified issues throughout the NEPA process.

EXHIBITS

A. Bennett Mountain Location Map
B. Notch Butte Location Map

BD_Bennett, BLM_ID <blm_id_bd_bennett@blm.gov>

Fwd: communication sites

Bluma, Jeremy <jbluma@blm.gov> Thu, Apr 9, 2015 at 7:41 AM
To: BLM_ID BD_Bennett <blm_id_bd_bennett@blm.gov>

---------- Forwarded message ----------
From: **Katie Fite** <katie@wildlandsdefense.org>
Date: Wed, Apr 8, 2015 at 5:55 PM
Subject: communication sites
To: Jeremy Bluma <jbluma@blm.gov>

Dear BLM,

Here are comments from WildLands Defense regarding the April 3, 2015 BLM letter regarding two BuRec site proposals.

We are concerned about infrastructure sprawl across public lands.

The scoping letter does not provide sufficient information on the Notch Butte site. How was habitat here, and within five miles, categorized in the 2006 Idaho sage-goruse plan? How is it currently categorized? We oppose this site, and the lands should be restored for sage-goruse habitat. There are higher points on private lands near here - use them instead of disturbing more public land.

Certainly there must be other facilities in the vicinity of Highway 93 that Bu Rec could use. Aren't there also private land possibilities? Please consider bundling on a private land site.

Please explain why BuRec needs these sites? Everyone seems to claim they need their own separate communication sites these days, and the sprawl is getting out of control.

Couldn't the function be served by using an existing tower or facility somewhere, or piggybacking on other sites?

There are a growing number of ugly night lights across the Snake River plain. Hopefully, these facilities will not be lit at night. Any lighting must be minimal, shaded, etc. Also, hopefully there will be no guy wires of any kind, as wires are deadly to birds.

Katie Fite
WildLands Defense
PO Box 125
Boise, ID 83701

--
v/r,

JEREMY BLUMA, Realty Specialist, BLM
Boise District, 3948 Development Ave., Boise, ID 83705

BD_Bennett, BLM_ID <blm_id_bd_bennett@blm.gov>

Bennett Mtn. & Notch Butte letter

Crall Gayla <GCrall@imd.idaho.gov> Thu, May 7, 2015 at 4:45 PM
To: "blm_id_bd_bennett@blm.gov" <blm_id_bd_bennett@blm.gov>

From Maj Gen Gary Sayler

Gayla Crall, Executive Assistant

Office of The Adjutant General/Commander, IDNG

208.422.5242

BLM on sites Bennett Mtn and Notch Butte May 2015.pdf
1594K

MILITARY DIVISION, STATE OF IDAHO
4040 W. GUARD STREET, BLDG 600
BOISE, IDAHO 83705-5004

C.L. "BUTCH" OTTER
GOVERNOR

THE ADJUTANT GENERAL
GARY L. SAYLER

May 6, 2015

Bureau of Land Management
Jeremy Bluma, Realty Specialist
3948 South Development Avenue
Boise, ID 83705-5339

Dear Mr. Bluma:

I reviewed the Bureau of Land Management (BLM) letter ref: IDI-37765 (IDI 10 2800) requesting comments on two proposed Bureau of Reclamation sites on Bennett Mountain and Notch Butte. Since the proposed facilities are located over 20 miles away from the Orchard Training Combat Center (OCTC), and other Idaho National Guard training facilities, there would be little to no impact to training or operations of the National Guard.

However, both Bennett Mountain and Notch Butte are Public Safety Communication microwave sites. The placement of towers on Bennett and Notch cannot obstruct those existing Line of Site paths, including 4.9GHz Broad band paths. See attached Google Earth photos.

As you may be aware, any tower or structure over 50 feet in height should be lighted to ensure visibility during daylight and with the aid of night vision devices as stipulated by Idaho Code 21-515A. See attached Idaho Statute.

POC for this communication is my Executive Officer, Mr. Dick Turner at 208.422.5471 or dturner2@imd.idaho.gov.

GARY L. SAYLER
Major General
The Adjutant General/Commander, IDNG

Attachments:
Google Maps
Idaho Statute

Bennett Mtn

Google earth

feet 200
meters 60

Notch Butte

Google earth

feet 500

meters 100

Idaho Statutes

TITLE 21
AERONAUTICS

CHAPTER 5
AIRPORT ZONING ACT

21-515A. HAZARDS TO AIR FLIGHT -- STANDARDS FOR GUYED TOWERS. (1) Any temporary or permanent guyed tower fifty (50) feet or more in height that is located outside the boundaries of an incorporated city or town on land that is primarily rural or undeveloped or used for agricultural purposes, or that is primarily desert, and where such guyed tower's appearance is not otherwise governed by state or federal law, rule or regulation, shall be lighted, marked and painted or otherwise constructed to be visible in clear air during daylight hours from a distance of not less than two thousand (2,000) feet. Guyed towers shall be required to be in accordance with the following:

(a) Guyed towers shall be painted in seven equal alternating bands of aviation orange and white. Such alternating bands shall begin with orange at the top of the tower and end with orange at the base.

(b) Guyed towers shall have a flashing light at the top of the tower. Such light shall be visible in clear air, with the naked eye, from a distance of two thousand (2,000) feet when flashing. Such light shall also be visible with night vision goggles.

(c) The surface area under the footprint of the tower and six (6) feet beyond the outer tower anchors shall have a contrasting appearance with any surrounding vegetation.

(d) Two (2) marker balls shall be attached to and evenly spaced on each of the outside guy wires.

(e) Guyed towers shall have a seven (7) foot long safety sleeve at each anchor point and shall extend from the anchor point along each guy wire attached to the anchor point.

(2) Any guyed tower that was erected prior to the effective date of this act shall be marked as required by the provisions of this section within one (1) year of the effective date of this act. Any guyed tower that is erected on or after the effective date of this act shall be marked as required by the provisions of this section at the time it is erected.

(3) For the purposes of this section, the following terms shall have the following meanings:

(a) "Guyed tower" means a tower that is supported in whole or in part by guy wires and ground anchors or other means of support besides the superstructure of the tower itself, towers used for military purposes excepted.

(b) "Height" means the distance measured from the original grade at the base of the tower to the highest point of the tower.

(c) "Temporary or permanent guyed tower" means a guyed tower erected and standing for any period of time whatsoever.

(4) This section shall not apply to power poles or structures owned and operated by an electric supplier as defined in section 61-332A(4), Idaho Code, to facilities used by a federal power marketing agency to serve public utilities or consumer-owned utilities or any structure the primary purpose of which is to support telecommunications equipment, including citizens band (CB) radio towers and all other amateur radio towers.

(5) Any person who violates a provision of this section shall be guilty of a misdemeanor.

History:

[21-515A, added 2012, ch. 164, sec. 1, p. 444; am. 2013, ch. 182, sec. 1, p. 435; am. 2013, ch. 210, sec. 1, p. 499.]

BD_Bennett, BLM_ID <blm_id_bd_bennett@blm.gov>

IDI-37765 (ID110) 2800

1 message

Jeff Berger <berger.jf@intermountaincomm.com> Fri, May 15, 2015 at 9:36 AM
To: blm_id_bd_bennett@blm.gov

In reference to the Bureau of Reclamation's application to construct a communications facility atop Bennett Mountain, I am submitting the following comments on behalf of Intermountain Communications. I have two concerns and one suggestion.

Our first concern is that Intermountain Communications was not officially notified of this application and were only made aware of it through a third party. We are the primary site owner atop Bennett Mountain, located on private property owned by Double Anchor Ranches and located directly adjacent to proposed Bureau of Reclamation site. For future reference we would prefer to be properly notified as others were.

My second but primary concern is the potential affect the proposed site may have on our existing site. Specifically the location of a 100', four legged tower with 5 dishes of the sizes listed in the application will very likely cause severe signal blockage and affect coverage of existing communications. The exact location of the tower structure and the dish locations on the tower may impact our use significantly and negatively. How will the Bureau of Reclamation determine how this new structure will impact our use? How will efforts be coordinated between the sites located on the private property and the proposed site located on public property? Has reclamation considered all the options regarding critical infrastructure in the current facility? Unless it can be determined that the proposed site will not have a negative impact on our existing site or our critical public safety and commercial communication systems, then Intermountain Communications opposes the application.

We strongly suggest the Bureau of Reclamation consider other options. One option would be to construct the new facility on a recently vacated site located on the private property owned by Double Anchor Ranches for the following reasons. This location had a similar use to what the Bureau of Reclamation is proposing. It has commercial power, adequate space and is located more favorably to the existing towers on the mountain. The site should also meet the path requirements the Bureau of Reclamation to it's other facilities. If it is possible to preserve the existing uses and meet the new requirements of the Bureau of Reclamation by locating at this site then it is reasonable to suggest this as an option.

Intermountain also requests these comments be considered, although outside the suggested date of May 6, 2015, due to the fact that Intermountain was not properly noticed.

Sincerely,
Jeff Berger
Intermountain Communications
208-366-1685 Office
208-599-3391 Mobile

Commenter	Comment	Responding Agency	Response
WildLands Defense	Infrastructure sprawl across public lands.	Reclamation	One of the items Federal agencies consider is efficient use of public lands, including the designation of areas to be utilized as communications sites pursuant to Title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.) and the Telecommunications Act of 1996 (47 U.S.C. 332). Section 704(c) of the Telecommunications Act requires Federal agencies to facilitate the development and placement of telecommunications equipment on buildings and land they manage when placement does not conflict with the agency's mission or current or planned use of the property. To maximize such use, Federal agencies are mandated to cooperatively use such sites to minimize any impacts to private, county, or state lands.
WildLands Defense	The scoping letter does not provide sufficient information on the Notch Butte site.	Reclamation	Acknowledged. Will provide additional information.
WildLands Defense	How was habitat here, and within five miles, categorized in the 2006 Idaho sage-grouse plan?	BLM	
WildLands Defense	How is it currently categorized?	BLM	

Commenter	Comment	Responding Agency	Response
WildLands Defense	We oppose this site, and the lands should be restored for sage-grouse habitat.	Reclamation	Acknowledged. However, these lands are currently identified as part of a designated communications site. Pursuant to Title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.) and the Telecommunications Act of 1996 (47 U.S.C. 332) Federal agencies are to facilitate the development and placement of telecommunications equipment on buildings and land they manage when placement does not conflict with the agency's mission or current or planned use of the property. Federal agencies are mandated to cooperatively use such sites to minimize any impacts to private, county, or state lands.
WildLands Defense	There are higher points on private lands near here use them instead of disturbing more public land.	Reclamation	There are no existing communication sites located on private land that provide the necessary communication path without requiring additional communication sites and equipment. The cost, timing, additional permits, etc., as well as contributing to infrastructure sprawl on non-federal lands do not provide an efficient use of public funds
WildLands Defense	Certainly there must be other facilities in the vicinity of Highway 93 that Bu Rec could use. Aren't there also private land possibilities?	Reclamation	Due to the proprietary nature of the operations of Reclamation's and BPA's facilities and the need to comply with the North American Electric Reliability Corporation (NERC) requirements for critical infrastructure protection, the option of co-location in existing facilities is null. Please see previous response regarding private land options.
WildLands Defense	Please consider bundling on a private land site.	Reclamation	Acknowledged, please see previous response.

Commenter	Comment	Responding Agency	Response
WildLands Defense	Please explain why BuRec needs these sites?	Reclamation	Reclamation has a need to convert to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operation; as well as, to comply with the Western Electricity Coordinating Council (WECC), North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP), and Electronic Access Control and Surveillance Systems (EACSS) standards; and to coordinate with the BPA to construct an improved microwave system from eastern Idaho to the Boise area. Reclamation's proposed communication facilities and additional equipment would improve the microwave communication system and reliability for monitoring and controlling both Reclamation and BPA facilities. Reclamation and BPA would be sharing resources and bandwidth capacity at both the Bennett Mountain and Notch Butte facilities. In order to complete the communication link between Reclamation's Black Canyon Control Center (located at the Black Canyon Diversion Dam) and Reclamation and BPA facilities located in eastern Idaho, new microwave communication facilities must be developed on Bennett Mountain and Notch Butte as well as new equipment installed at Reclamation's Pacific Northwest Regional Office, Snake River Area Office and Upper Snake Field Office.
WildLands Defense	Everyone seems to claim they need their own separate communication sites these days, and the sprawl is getting out of control. Couldn't the function be served by using an	Reclamation	Acknowledged, please see previous response. Reclamation CIP and security standards provide guidance regarding physical access to such facilities.

Commenter	Comment	Responding Agency	Response
	existing tower or facility somewhere, or piggybacking on other sites?		
WildLands Defense	There are a growing number of ugly night lights across the Snake River plain. Hopefully, these facilities will not be lit at night. Any lighting must be minimal, shaded, etc.	Reclamation	Under current BLM guidance and business practices lighting is restricted to a minimum. Under U.S. Department of Transportation – Federal Aviation Administration Advisory Circular AC 70/7460-1K Reclamation is not required to place any illumination on a tower of this height (100-ft). Reclamation is not proposing to install any lights or illumination on the tower or buildings at this time.
WildLands Defense	Also, hopefully there will be no guy wires of any kind, as wires are deadly to birds.	Reclamation	No. The towers being proposed are 100-foot free standing towers.
State of Idaho National Guard	Obstruction of existing line of site paths including 4.9GHz band paths.	Reclamation	Response - Reclamation has done preliminary studies to show that no existing line of site paths including 4.9GHz band paths will be affected. Reclamation will have a certified/warrantied path-way survey completed prior to any final tower location. Reclamation will adjust such a location if necessary.
State of Idaho National Guard	That towers over 50-ft should be lighted as stipulated by Idaho Code 21-515A.	Reclamation	The code cited provided applies to “Guyed Towers” only and not to free standing towers of which is proposed for these sites. U.S. Department of Transportation – Federal Aviation Administration Advisory Circular AC 70/7460-1K governs the erection of such towers and does not require any lighting.

Commenter	Comment	Responding Agency	Response
Intermountain Communications	First concern is that Intermountain Communications was not officially notified of this application and were only made aware of it through a third party.	Reclamation	It was an omission on both BLM's and Reclamations part not to directly send a scoping letter to Intermountain Communications, and we will endeavor to make sure Intermountain Communications is kept informed. We had considered Mr. Jeff Berger to be an agent of Intermountain Communications and sent him a scoping letter inviting comment. Mr. Berger's submitted comment stated he is an agent of Intermountain Communications. That being the case, Reclamation did meet with Mr. Berger on February 23, 2015 to discuss the service agreement for power at the Bennett Mountain site and as part of that discussion Reclamation staff stated that NEPA compliance would begin shortly after his agency had met with BLM.
Intermountain Communications	A primary concern is the potential affect the proposed site may have on our existing site. Specifically the location of a 100', four legged tower with 5 dishes of the sizes listed in the application will very likely cause severe signal blockage and affect coverage of existing communications and its use.	Reclamation	We acknowledge such a concern and from Reclamation's preliminary pathway analysis has determined that the proposed tower location will not affect your existing communication site. To confirm this analysis, Reclamation will have a certified/warrantied path-way survey completed prior to any final tower location. Reclamation will adjust such a location if necessary.
Intermountain Communications	How will efforts be coordinated between the sites located on the private property and the proposed site located on public property?	Reclamation	As mentioned previously, Reclamation has been and will continue to discuss and keep the other site users informed on what it plans to do, including when any extensive work will be occurring at the site. The United States, including all Federal agencies or representatives thereof, has an existing right-of-way easement to access this site, and will operate in accordance with that easement.

Commenter	Comment	Responding Agency	Response
Intermountain Communications	Has reclamation considered all the options regarding critical infrastructure in the current facility? Unless it can be determined that the proposed site will not have a negative impact on our existing site or our critical public safety and commercial communication systems, then Intermountain Communications opposes the application.	Reclamation	Yes. Federal requirements and policy are one of the main driving forces for accomplishing this action. Reclamation has a need to convert to a centrally operated supervisory control and data acquisition (SCADA) system for control of dam operation; as well as, to comply with the Western Electricity Coordinating Council (WECC), North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP), and Electronic Access Control and Surveillance Systems (EACSS) standards. Due to the proprietary nature of the operations of Reclamation's and BPA's facilities and the need to compliance with the NERC requirements for CIP, the option of co-location in existing facilities is null.
Intermountain Communications	We strongly suggest the Bureau of Reclamation consider other options. One option would be to construct the new facility on a recently vacated site located on the private property owned by Double Anchor Ranches	Reclamation	A private land alternative was developed and will be analyzed in the environmental assessment.