RECLAMATION

Managing Water in the West

Lahontan Substation Rebuild and Upgrade Project

Environmental Assessment LO-2012-1023

U.S. Department of the Interior
Bureau of Reclamation
Lahontan Basin Area Office
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Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Acronyms and abbreviations

APE	Area of Potential Effect
BLM	Bureau of Land Management
BMPs	best management practices
EA	Environmental Assessment
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
Far Western	Far Western Anthropological Research Group, Inc.
FERC	Federal Energy Regulatory Commission
ITAs	Indian Trust Assets
KOP	key observation points
kV	kilovolt
LSRA	Lahontan State Recreation Area
M	moment magnitude
Master Plan	Churchill County 2010 Master Plan
MVA	Million Volt-Amperes
NAPCP	Nevada Air Pollution Control Program
NDEP	Nevada Division of Environmental Protection
NEPA	National Environmental Policy Act
Nevada SHPO	Nevada State Historic Preservation Office
NNHP	Nevada Natural Heritage Program
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
NVCRIS	Nevada Cultural Resource Information System
Parks	Nevada Division of State Parks
Project	Lahontan Substation Rebuild and Upgrade Project
Reclamation	Bureau of Reclamation
RTU	remote terminal unit
SWPPP	Stormwater Pollution Prevention Plan
SWReGAP	Southwest Regional Gap Analysis Project
US 50	US Highway 50
USFWS	U.S. Fish and Wildlife Service
VRM	Visual Resource Management System
WEG	Wind Erodibility Groups

Chapter 1 – Purpose and Need

1.1 Introduction

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) (42 United States Code 4321-4347), Council of Environmental Quality Regulations for implementing the procedural requirements of the NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and the Department of the Interior NEPA regulations (43 CFR Part 46). This document evaluates the environmental effects by providing an assessment of the potential impacts to the human environment associated with issuing a license as a result of the Standard Form 299 Application for Transportation and Utility Systems and Facilities on Federal Lands (SF-299 Application) for the construction of a new substation, and abandonment and removal of the existing substation by Sierra Pacific Power Company dba NV Energy (NV Energy) on Bureau of Reclamation (Reclamation)-managed land.

1.2 Proposed Action

The proposed action is to issue a license for NV Energy's SF-299 Application for the construction of a new substation, which would be adjacent to the existing Lahontan Substation on lands under Reclamation's jurisdiction located in Churchill County, Nevada (Figure 1). The Lahontan Substation Rebuild and Upgrade Project (Project) would consist of rebuilding the Lahontan Substation approximately 200 feet to the northeast of the existing site, and would involve the installation of a 4.5/7.5 Million Volt-Amperes (MVA) regulator, seven 69-kilovolt (kV) circuit breakers, a 69-kV circuit switcher, instrument transformers, service transformers, switches, capacitor bank, new control enclosure to accommodate new protection panels, new remote terminal unit (RTU), and telecom infrastructure, including fiber optic cables. In addition to the substation components, NV Energy proposes to construct a new 200-foot access road and to realign six 60-kV transmission lines. The 60-kV transmission line realignments would require the removal of approximately 18 existing wood single-pole structures and the placement of approximately 5 new wood single-pole tangent structures and 12 new wood single-pole angle structures (Figure 2). Ground disturbance for the proposed Project would include approximately 14.8 acres due to construction. Of the 14.8 acres, approximately 2.3 acres would be permanent ground disturbance for the substation site, 200 feet of access road, and approximately 17 new structure locations.

The existing Lahontan Substation would be deconstructed and removed, however the perimeter fence and gravel surface would be left for use as a storage area by the Nevada Division of State Parks (Parks). Deconstruction of the existing substation would include the removal of the above-ground existing equipment. Concrete and steel foundations would be left in place with the existing gravel surface and perimeter fencing. Oil spills on the existing site would be cleaned by removing contaminated soil.

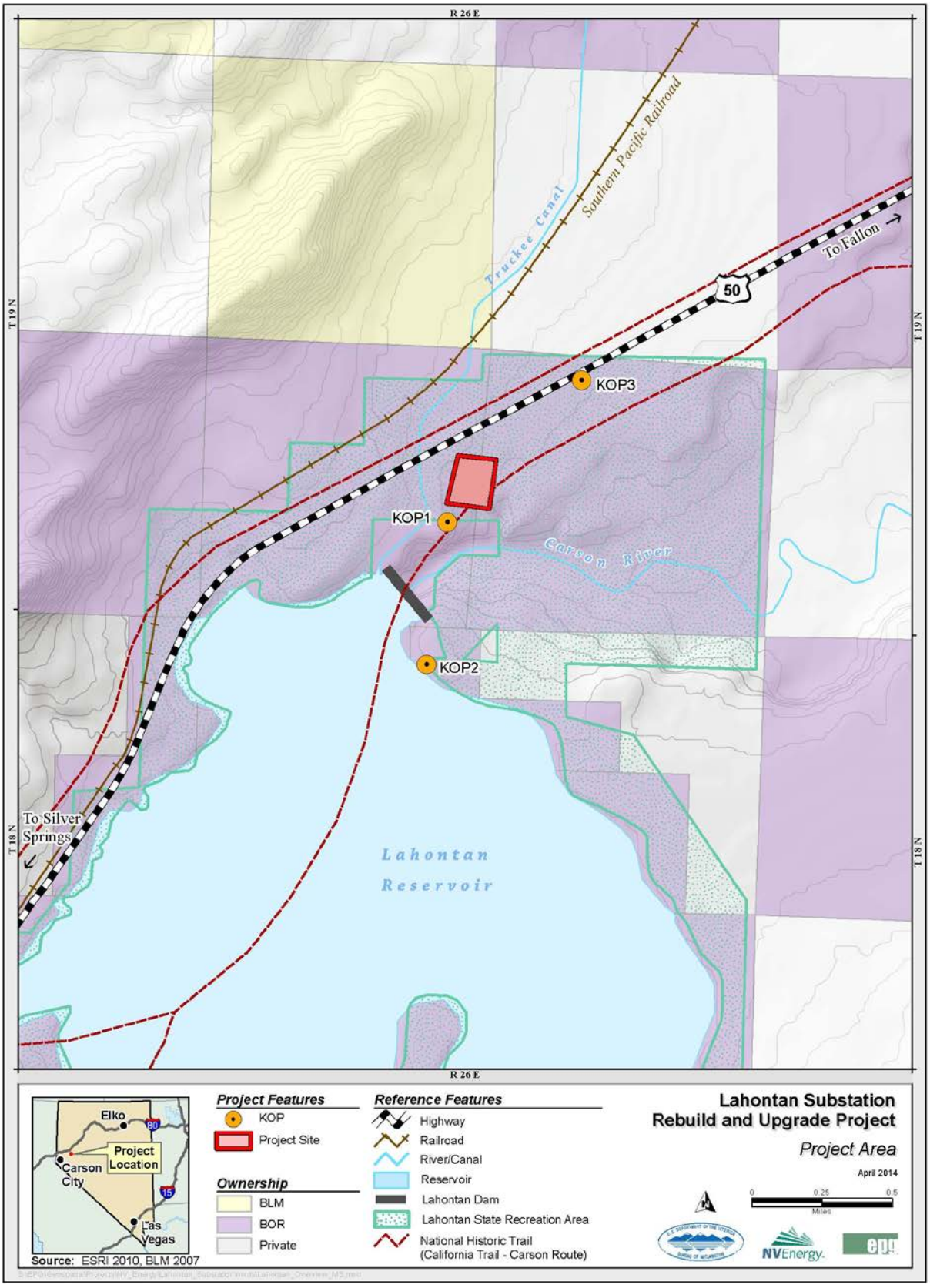

Figure 1. Project Area Map

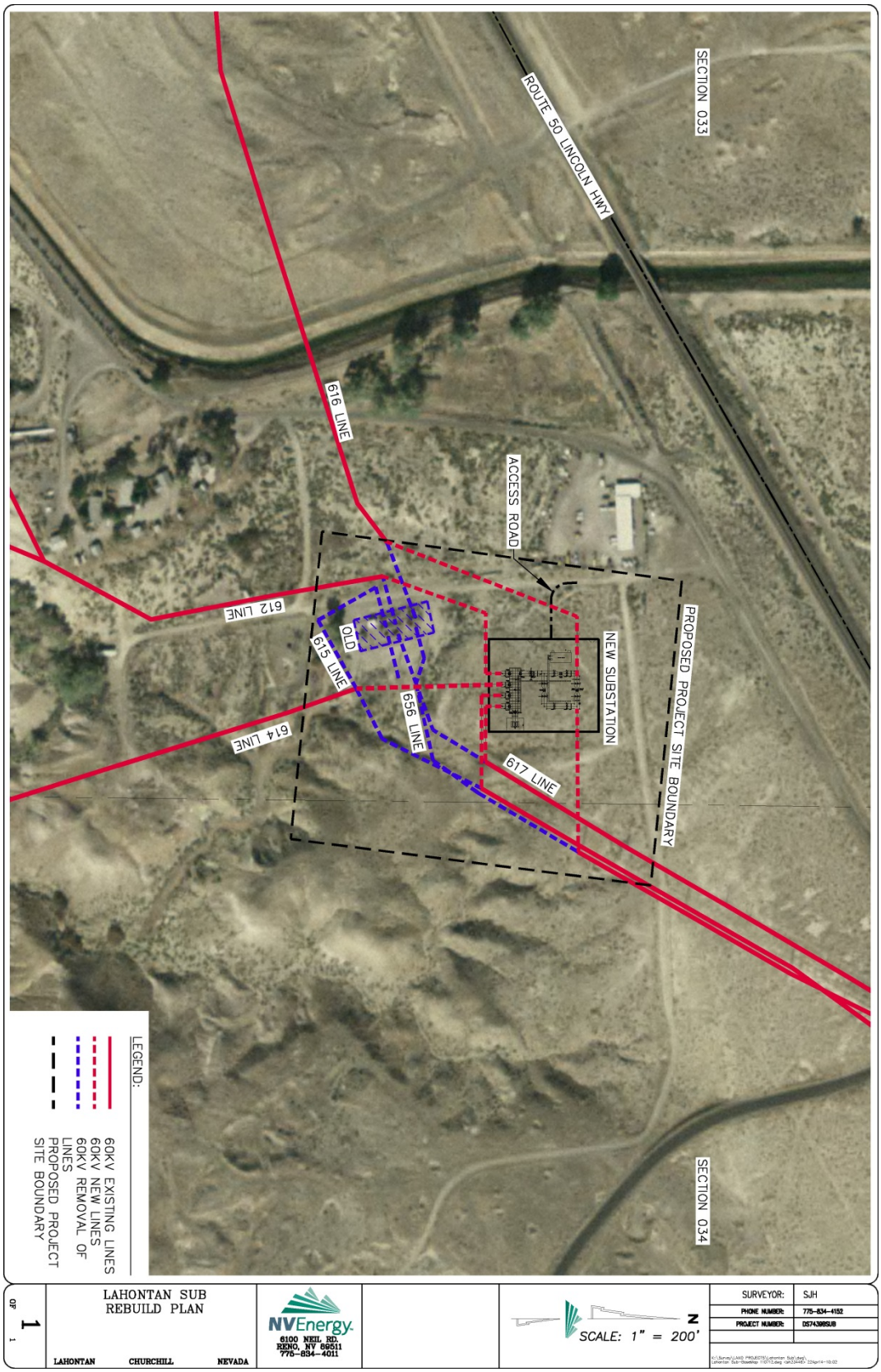

Figure 2. Project Site Map

1.3 Need for the Proposed Action

The existing Lahontan Substation was originally constructed in the 1950's but since then, has undergone major modifications and is now currently beyond its useful life. The substation is the primary source for customers in the Fallon area as well as the Naval Air Station, and brings geothermal generation into NV Energy's system from the Stillwater area. Upgrades to the substation are necessary to more reliably serve NV Energy's customers. The need for the proposed action is to bring the Lahontan Substation facilities up-to-date and get them operating in a reliable fashion, and an authorization and issuance of a license is needed for the construction of a new substation on Reclamation managed lands.

1.4 Purpose for the Action

The purpose of the project is to more reliably serve the electrical needs of the Fallon, Nevada area and the Naval Air Station, and to more reliably bring geothermal generation into NV Energy's system from the Stillwater area.

1.5 Relevant Statutes, Regulations, and Other Plans

In addition to the NEPA, actions of Reclamation are guided by a number of statutes, regulations, and agreements, including:

- 43 CFR § 429 includes the requirement for the issuance of a use authorization (the License) and the requirement to perform environmental compliance
- Endangered Species Act (ESA)
- Migratory Bird Treaty Act
- Clean Water Act
- Section 106 of the National Historic Preservation Act
- Nevada Division of Environmental Protection, Bureau of Water Pollution Control, National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit
- Nevada Division of Environmental Protection, Bureau of Air Pollution Control, Surface Area Disturbance Permit
- Other pertinent state, local, or county regulations

1.6 Issues, Public Scoping

Public scoping letters have been sent to the Nevada State Clearinghouse and federal, state, and local government officials and jurisdictions. At the time of the printing of this document, one comment was received from the National Park Service (NPS). The comment, provided by the NPS National Trails Intermountain Region Archaeologist, verified the location of the California National Historic Trail in relation to the Project, called attention to additional potential cultural

resources within the Project vicinity, and noted that any trail remnant in that area would have likely been destroyed by previous development.

1.7 Alternatives Considered but Eliminated

The Lahontan Substation requires upgrades due to its age and failing reliability. NV Energy considered rebuilding the substation in its existing location, which would necessitate removing the substation from service until such time that the upgrades were complete. Because this could not be accomplished without negatively affecting NV Energy's electrical system and customers, NV Energy eliminated this alternative from further consideration.

Chapter 2 – Proposed Action and Alternatives

This chapter describes the activities of both the No Action and the Action (proposed action) alternatives. These alternatives have been evaluated with respect to the affected environment, as described in Chapter 3, to provide a clear basis among the options available, from which Reclamation will make its decision.

2.1 No Action

Under the No Action alternative, Reclamation would not approve NV Energy's SF-299 Application for the construction of a new substation. The existing substation would remain in use, no new substation facilities would be constructed, and reliability of the electrical service to the Fallon, Nevada area and the Naval Air Station may diminish over time.

2.2 Proposed Action

The proposed action includes the construction of a new 60-kV substation approximately 200 feet northeast of the existing Lahontan Substation in Churchill County, Nevada. The existing substation would be deconstructed and removed, however the perimeter fence and gravel surface of the substation site would be left in place for use as a storage area by Parks. Construction activities are expected to begin in June 2014 and will take approximately six months to complete.

As part of construction activities, NV Energy would conduct geotechnical investigations to determine the suitability of soils, and grading and foundation requirements of the site. These studies would include drilling one 20-foot-deep and one 40-foot-deep soil boring, 8 inches in diameter, to collect samples at two locations within the proposed substation site (Figure 2). The 20-foot-deep boring will be dry and the 40-foot-deep boring will consist of mud rotary drilling, which will introduce tap water. Wet boring will determine where the ground water level is (if at all) to 40 feet. If water is found, a temporary casing will be inserted into the hole to measure the water level depth from sea level.

Resistivity measurements will be taken along the west and north boundary lines of the proposed substation location along with a third line that runs diagonally between the two. The resistivity measurements will consist of 15 measurements along each line, taken by inserting a metal rod 12 inches into the soil.

Removal of the existing substation would involve dismantling and removing the existing circuit breakers, transformers, switches, and capacitor bank. A photo of the existing substation is included as Figure 3. The substation equipment would be disposed of in accordance with applicable state and federal regulations or taken to an NV Energy facility for reuse or recycling. Concrete and steel foundations will be left in place with the existing gravel surface. Portions of the fence may be removed for deconstruction; however it will be replaced upon completion, for use by Parks. Once the substation equipment is removed, a Nevada State Certified Environmental Manager will conduct a visual observation of the site for surface contamination. Any contamination observed will be cleaned by removing contaminated soil.

Figure 3. Existing Lahontan Substation

The construction of the proposed Project would consist of the installation of a 4.5/7.5 MVA regulator, seven 69-kilovolt (kV) circuit breakers, a 69-kV circuit switcher, instrument transformers, service transformers, switches, capacitor bank, new control enclosure to accommodate new protection panels, new RTU, and telecom infrastructure, including fiber optic cables. NV Energy also proposes to construct a new access road and to realign six 60-kV transmission lines. The 60-kV transmission line realignments will require the removal of approximately 18 existing wood single-pole structures and the placement of approximately 5 new wood single-pole tangent structures and 12 new wood single-pole angle structures (Figure 2). In order to install the new single-pole tangent and angle structures, one hole will be excavated for each structure. All holes will be excavated using augers or other back-hoe type equipment, and will be approximately 3 feet in diameter and approximately 10 feet deep. Additionally, holes for guy wire anchors will be excavated at angle structures. These holes will be excavated to depths of approximately 10 feet. The structure pole bases will be buried in the ground, and native soil will be used to fill the holes (imported soil will be used if native material is unsuitable for compaction). At angle structures, guy wires will be used to support the structures.

The substation footprint would comprise an approximate 270-foot by 280-foot area, and would require a new access road approximately 200 feet long by 40 feet wide. The total permanent disturbance for all Project facilities would be approximately 2.3 acres. Site preparation will begin with clearing vegetation and organic material from the proposed site. The site will then be graded to subgrade elevation. Structural footings and underground utilities, along with electrical conduits and grounding grids will be installed, followed by above-ground structures and equipment. Typical subgrade elevation is 3–6 inches below a finished grade, however geotechnical studies will determine the final grade. A chain-link fence will be constructed around the site for security and to restrict unauthorized persons and wildlife from entering the substation. The site will be graded to a finish grade and graveled.

A new control enclosure will likely be constructed of prefabricated steel and concrete. Major equipment installed inside the control enclosure will consist of relay and control panels, alternating current and direct current load centers to provide power to equipment inside and outside the control building, a battery bank to provide a back-up power supply, a heating/cooling system to prevent equipment failure, and communications equipment for remote control and monitoring of essential equipment. Communications equipment will be for the sole use of NV Energy.

Steel structures will be erected on concrete footings to support switches, electrical buswork, instrument transformers, lightning arrestors, and other equipment, as well as termination structures for incoming transmission lines. Structures will be grounded by thermally welding one or more ground wires to each structure.

Major equipment will be set by crane and either bolted or welded to the foundations to resist seismic forces. Smaller equipment, including air switches, current and voltage instrument transformers, insulators, electrical buswork, and conductors will be mounted on steel structures. Once construction of the facilities is complete, NV Energy will provide Reclamation as-built drawings showing final dimensions.

Surplus materials, equipment, and construction debris will be removed at the completion of construction activities. All man-made construction debris will be removed and disposed of as appropriate at permitted landfill sites. Disturbed areas will be recontoured if necessary and seeded with a Reclamation-approved seed mix.

Table 2-1 describes the typical types of equipment which may be used for substation and transmission line construction.

Table 2-1. Typical Substation and Transmission Line Equipment

Equipment	Use
¾-ton and 1-ton pickup trucks	Transport construction personnel
2-ton flat-bed trucks; flat-bed boom truck	Haul and unload materials
Rigging truck	Haul tools and equipment
Mechanic truck	Service and repair equipment
Aerial bucket trucks	Access poles, string conductor, and other uses
Shop vans	Store tools
Bulldozer	Grade access roads and pole sites and reclamation
Road grader	Construct, maintain, and upgrade roads
Compactor	Construct access roads
Truck-mounted digger or backhoe	Excavate
Small mobile cranes (12 tons)	Load and unload materials
Large mobile cranes (75 tons)	Erect structures
Transport	Haul poles and equipment
Drill rig with augers	Excavate and install fences

Table 2-1. Typical Substation and Transmission Line Equipment	
Puller and tensioner	Pull conductor and wire
Cable reel trainers	Transport cable reels and feed cables into conduit
Semi tractor-trailers	Haul structures and equipment
Splice trailer	Store splicing supplies and air condition manholes
Take-up trailers	Install conductor
Air compressors	Operate air tools
Air tampers	Compact soil around structure foundations
Dump truck	Haul excavated materials and import backfill
Fuel and equipment fluid truck	Refuel and maintain vehicles
Water truck	Suppress dust and fire
Winch truck	Install and pull sock line and conductors into position

2.3 Applicant Committed Practices

NV Energy has committed to implementing best management practices (BMPs) as part of the proposed Project. The following BMPs would avoid or reduce impacts to vegetation as a result of ground disturbance or noxious weed introduction:

- All gravel and/or fill material will be certified as weed-free.
- All off-road equipment will be cleaned (power or high-pressure cleaning) of all mud, dirt, and plant parts prior to initially moving equipment onto lands under Reclamation's jurisdiction. Any equipment that leaves the Project site will be cleaned again prior to reentry.
- Disturbances to areas infested with noxious weeds will be avoided to the extent possible.
- Any noxious weeds on site will be avoided or removed by physical removal or an approved herbicide. Wherever possible, vegetation will be left in place. Where vegetation must be removed, it will be cut at ground level to preserve the root structure and allow for potential resprouting. Disturbed areas will be recontoured and seeded with a seed mixture approved by Reclamation.
- If required by Reclamation, prior to construction, NV Energy personnel will identify all noxious weeds present on the land to be included in the authorized construction site and will provide this information to Reclamation. A determination will be made by Reclamation of any noxious weeds that require flagging for treatment. NV Energy will treat the noxious weeds as required by Reclamation.

The following BMPs would avoid or reduce impacts to wildlife during construction and operation of the Project:

- If required by Reclamation, pre-construction surveys of the authorized construction site and the access road will be conducted for biological resources. Potential habitat for listed

species identified during the preconstruction survey will be fenced for avoidance. If avoidance is not feasible, consultation with appropriate jurisdictional agencies will be conducted prior to work in the area.

- Excavations left open overnight will be covered or fenced to prevent livestock or wildlife from falling in. All covers will be secured in place and strong enough to prevent livestock or wildlife from falling in.

The following BMPs would avoid or reduce impacts to water and soil resources:

- Sediment controls, such as silt fence and sediment basins that capture eroded sediment, will be implemented.
- Materials handling and spill prevention measures designed to prevent the release of petroleum products and other chemicals and substances into stormwater runoff will be implemented.

The following BMPs would avoid or reduce impacts to air quality:

- All areas subject to ground disturbance will be watered as needed to control dust.

Chapter 3 – Affected Environment

3.1 Introduction

This chapter discusses the affected environment of the proposed action's Project site and resource study areas. The Project site includes the lands immediately surrounding the proposed and existing substations and transmission lines, and access roads. The resource study areas include specific areas of analysis for each resource that may be directly or indirectly affected by the proposed action and include lands within an approximate one-mile radius from the Project site.

3.2 Description of Relevant Affected Issues and Resources

3.2.1 CULTURAL AND ARCHAEOLOGICAL RESOURCES

This section presents a summary of cultural resources documented within the Project Area of Potential Effect (APE) as well as in the Project vicinity. A Class III cultural resources inventory included a pre-field records and literature review and pedestrian survey across the APE to identify and document cultural resources that could be affected by the proposed Project. Six cultural resources were identified within the project APE by Far Western Anthropological Research Group, Inc. (Far Western) (Orvald 2014). The resources identified include the Fallon Cutoff (CrNV-03-54190), which is an element of the Lincoln Highway, four isolated historic refuse scatters (26CH3797, 26CH3798 , 26CH3799, and 26CH3800), and the Lahontan Substation.

The Project lies near the margin of the western Great Basin and the Sierra Nevada Front, and the APE is located near the southwestern margin of Lahontan Valley, on the north side of the Carson River immediately north of Lahontan Dam. The Carson River originates in the Sierra Nevada Range and trends north and east to its eventual impoundment at Lahontan Reservoir at the western side of Churchill County. The Carson River Valley is a natural transportation and resource acquisition corridor that has served through time from Native American trail to modern highway.

Far Western conducted a literature review and records search as part of the Class III cultural resources inventory for the Project. Historic-era documents and modern literature depict transportation, communication, overhead utilities, and reclamation systems of Reclamation's Newlands Project in the Project vicinity. A review of the online database, the Nevada Cultural Resource Information System (NVCRIS), revealed that cultural resources are not documented in the project footprint and fifteen archaeological sites are located within a one-mile buffer zone surrounding it. Named archaeological sites in the area include the Carson River Route of the California Emigrant Trail (CrNV-03-5396), Lahontan Dam and Power Plant (CrNV-03-1845), the Truckee Canal, Lahontan City (CrNV-03-3117/26CH895), Rock Dam Ditch, the Lincoln Highway/US Highway 50 (US 50), and the Southern Pacific Railroad. Lahontan Dam and Power Plant, and the Truckee Canal are currently listed on the National Register of Historic Places as central elements of the Newlands Project.

The Carson River Route of the California Emigrant Trail passes south of the current Project area and north of the Carson River. Lahontan City was a construction camp created by the Reclamation Service to house federal employees working at the Lahontan Dam construction site between 1911 and 1915. The Lahontan City archaeological site is located north of US 50. Lahontan Dam and Power Plant, and Lahontan Reservoir lie southwest of the Project site.

Pursuant to 36 CFR Part 800.4(a)(4), Reclamation invited the Fallon Paiute-Shoshone Tribe to assist in the identification of properties in the project area that may be of religious and cultural significance. To date, no response has been received. Reclamation will consider all tribal comments and contact the Tribe, as appropriate, if any such properties are subsequently identified.

The Lahontan Substation is currently part of the modern Newlands Project. The existing substation was built in the 1950's and underwent major modifications in the early 1970's. As a result of modifications to the substation, it is considered less than 50 years old. The substation does not meet any of the four criteria for eligibility under 36 CFR Part 60.4 or any of the special requirements for criteria considerations, as they are lacking exceptional importance. Reclamation considers that the Newlands Project is eligible for listing in the National Register, under Criterion A, with the themes of reclamation, irrigation, and the development of agriculture in the State of Nevada. The period of significance for the Newlands Project is not clearly stated in the National Register nomination. Reclamation considers the period of significance to be from 1903–1942. The period of significance of the Newlands Project and its conveyance features begins in 1903, with the start of construction of the Truckee Canal, and ends in 1942 with the termination of the Civilian Conservation Corps program. The boundaries of the entire Newlands Project and identification of all the contributing and non-contributing properties associated with it are still undefined and beyond the scope of this current undertaking. Reclamation continues to consult with Nevada State Historic Preservation Office (Nevada SHPO) on its ongoing effort to clearly identify and document the historic property, as well as associated contributing and non-contributing elements and features as projects and resources allow.

Although it is outside the project APE (500–600 feet away), Reclamation will assume eligibility (National Register Criterion A) for Lahontan Dam government camp for project management purposes only when considering the potential for indirect effects. Reclamation has determined that fully recording and evaluating Lahontan Dam government camp is beyond the magnitude and nature of the undertaking. Lahontan Dam and Power Plant was listed on the National Register in 1981 as part of the Newlands Project Thematic Resource. Reclamation has determined that the Lahontan Substation is not eligible for the National Register on its own. Although the Lahontan Substation is related to delivery of power, the structure is well outside any suggested period of significance (Buhr 2001:30). The period of significance for key components of the project's water engineering network that contribute to the eligibility of the Newlands Project is identified as 1906–1926.

3.2.2 INDIAN TRUST ASSETS

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States for recognized Indian Tribes or individuals. The Secretary of the Interior, acting as the trustee, holds many assets in trust. Examples of objects that may be trust assets are lands, minerals, hunting and fishing rights, and water rights. While most ITAs are on reservations, they may also be

found off-reservations. There are no trust resources within the Project site, although the Fallon Paiute-Shoshone Indian Reservation is located approximately 25 miles east and the Pyramid Lake Paiute Indian Reservation is located approximately 12 miles northwest.

The Fallon Paiute-Shoshone Indian Reservation is located in Churchill County in west-central Nevada, approximately 10 miles northeast of Fallon and 65 miles east of Reno and Carson City. The Reservation includes members of the Paiute and Shoshone Tribes. The Fallon Indian Colony is located on 60 acres and Colony land is used for residential and commercial purposes.

The reservation of the Pyramid Lake Paiutes, located in Washoe County north of Reno and including Pyramid Lake, presently covers 475,085 acres. The Federal actions that set aside Pyramid Lake Indian Reservation explicitly reserved Pyramid Lake for the Tribe's benefit.

3.2.3 GEOLOGY RESOURCES

This section presents an overview of the geologic conditions that occur within the study area that could have a potential impact on Project construction or operation.

3.2.3.1 EXISTING ENVIRONMENT

The Project is located in the southern part of the Basin and Range physiographic province, which is characterized by north-south trending mountain ranges that are separated by alluvium-filled, nearly-flat-to-gently-sloping valleys.

3.2.3.2 GEOLOGIC HAZARDS

Geologic hazards include earthquakes (seismicity) and active faults. The seismicity of the Project site is average relative to the State of Nevada. Seismicity values range from 48 to 65 percent of acceleration due to gravity (9.8 m/s2), with a 2 percent probability of exceedance over the next 50 years (Peterson et al. 2008). A single earthquake with a magnitude greater than 3.0 M (moment magnitude) was recorded on July 20, 1992, and six earthquakes with magnitudes between 2.8 and 2.9 M were recorded in 1991, 1992, and 2004 within 5 miles of the Project site.

Quaternary faults, which are considered to still be active, are present within 1 mile of the Project site and include two mapped sections of the Carson Lineament (Adams and Sawyer 1999). The most recent movement of the Carson Lineament has been dated to the Latest Quaternary, which is less than 15,000 years.

3.2.3.3 MINERAL RESOURCES

The Bureau of Land Management (BLM) manages mineral resources in the Project site. An inventory of federal mineral resources was reviewed to identify any locatable, leasable, and salable mineral resources present in the study area. Locatable resources are typically metallic mineral deposits, such as copper or gold; leasable resources include energy, such as petroleum, natural gas, and coal; and salable resources include sand and gravel pits. Information for the inventory was obtained primarily from the LR2000 online database maintained by the BLM (BLM 2013).

No mineral resources were identified by the survey of the LR2000 database within Section 33 Township 19N Range 26E.

3.2.3.4 SOIL RESOURCES

Soil resource data were obtained from the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database; specifically, the survey of the Fallon-Fernley area, and parts of Churchill, Lyon, Storey, and Washoe counties, Nevada (NV603).

Soil map units were assessed for their susceptibility to both water and wind erosion. Susceptibility to water erosion was assessed based on the K-factor of the whole soil as determined by the NRCS. Generally, soils with higher K-factor values are more susceptible to water erosion. For the purposes of this Project, soils with a K-factor less than 0.20 have a low susceptibility to water erosion, those with a K-factor greater than 0.40 have a high susceptibility, and those with K-factors between 0.20 and 0.40 have a moderate susceptibility. Susceptibility to wind erosion was assessed based on Wind Erodibility Groups (WEG), to which the individual soil map units were assigned by the NRCS. Soils that are almost pure sand or silt with little to no binding agents, such as clay or organic material, are most susceptible to wind erosion; whereas rock outcrops or areas covered in a rock armature, such as desert pavement, are not as susceptible to wind erosion. Soil map units assigned to WEG 1 or 2 have a high susceptibility, those assigned to WEG 3, 4, or 4L have a moderate susceptibility, those assigned to WEG 5, 6, or 7 have a low susceptibility, and those assigned to WEG 8 are not susceptible to wind erosion.

Two soil map units were identified within the Project site: the Bango-Hawsley association and Biddleman-Mazuma-Weena association (Table 3-1) (U.S. Department of Agriculture 2013).

Table 3-1. Soil Map Units

Soil Map Unit	Component Series	Component Percentage	Drainage	K_f-factor	WEG
Bango-Hawsley Association					
	Bango	45	Well drained	0.32	3
	Hawsley	40	Well drained	0.32	3
Biddleman-Mazuma-Weena Association					
	Biddleman	50	Well drained	0.37	6
	Mazuma	25	Well drained	0.37	6
	Weena	10	Well drained	0.43	6

3.2.4 LAND USE AND RECREATION

The land use and recreation inventory identified existing, planned, and officially designated uses within a 1-mile radius of the proposed Project site (land use study area). This inventory is based on the review and interpretation of existing maps, documents, and field reconnaissance. Federal, state, county, and local agencies were contacted to obtain and/or confirm specific land use data.

3.2.4.1 EXISTING LAND USE

The following categories of existing land use were identified and mapped based on information from aerial photography, existing maps, planning documents, and the Churchill County 2010 Master Plan (Master Plan) and verified through field reconnaissance.

Industrial

Industrial land uses currently within the land use study area include the Lahontan Dam and its associated infrastructure, an irrigation canal managed by the Truckee-Carson Irrigation District, the existing Lahontan Substation and associated transmission lines, and a designated BLM utility corridor. The construction of the Lahontan Dam was completed in 1915 as part of the Newlands Project. The dam is the only major reservoir on the Carson River and stores water diverted from the Truckee River and the natural flows of the Carson River in order to aid in the irrigation of lands within western Nevada and to generate hydroelectric power. The Truckee Canal, also constructed as part of the Newlands Project, was built to convey water from the Truckee River to the Lahontan Reservoir/Carson River (Reclamation 1996).

Reclamation began construction of the Newlands Project, formerly the Truckee-Carson Project, in 1903. The Newlands Project provides full service irrigation water from the Truckee and Carson Rivers for about 55,000 acres of cropland in the Lahontan Valley near Fallon, Nevada and bench lands near Fernley, Nevada. In addition, water from about 6,000 acres of project land has been transferred to the Lahontan Valley wetlands within the Stillwater National Wildlife Refuge near Fallon, Nevada. The Truckee-Carson Irrigation District is under contract with the United States for operation and maintenance of facilities associated with Newlands Project (Reclamation 2011).

Recreation

The Project site is located within the Lahontan State Recreation Area (LSRA), which was created through the construction of Lahontan Dam. Much of the LSRA is owned by Reclamation and managed by Parks. LSRA includes the Lahontan Reservoir, with 69 miles of shoreline, covering 12,000 surface acres when full, and provides recreational facilities and opportunities for picnicking, camping, swimming, fishing, wildlife viewing, hiking, boating and water skiing, hunting, and horseback riding, as well as providing boat launches, restrooms with showers and RV dump stations (Nevada State Parks 2013). Although no designated recreational uses exist within the Project site itself, numerous opportunities for designated and dispersed recreation exist within the recreation study area. Recreational uses within the recreation study area are primarily associated with activities available on the Carson River and the Lahontan Reservoir.

The Carson River, which is located south of the Project site and flows into and from the Lahontan Reservoir, provides recreation opportunities including boating and fishing. Additional recreation opportunities within the recreation study area include a designated bike trail along US 50, identified by the Master Plan, and dispersed recreation on the surrounding public and private land.

Residential

Fewer than 20 isolated residences are located within the land use study area. The nearest occupied residences (housing for Parks employees) are approximately 0.15 miles south-southwest of the Project site.

Transportation

Transportation facilities within the land use study area include US 50 and paved and unpaved roadways. US 50 is located approximately 0.10 miles north of the Project site, and follows a generally northeast/southwest path within the study area. Much of US 50, including the portion

within the land use study area, travels parallel to the historic Pony Express Trail and California Trail (U.S. Department of Transportation 2013). Paved and unpaved roadways providing access to Lahontan Dam, the Carson River, and other developed facilities are also located within the land use study area.

The Southern Pacific Railroad is located approximately 0.25 miles north of the Project site, oriented in a northeast/southwest direction.

3.2.4.2 FUTURE LAND USE

Future land use data was obtained from information contained in the Master Plan, as well as from correspondence with staff and officials representing federal, state, and county agencies. No modifications to the existing land uses within lands under Reclamation jurisdiction or Parks-managed lands are anticipated inside the Project site (Mergell 2013; Birri 2013). Information from the Master Plan was the primary basis of this analysis.

Churchill County Master Plan

The Master Plan was last updated and adopted by the Churchill County Board of County Commissioners in September 2010, and was "designed to establish Churchill County's vision for the future. It provides the framework and foundation for decision making for the Board of County Commissioners, the Planning Commission and the community on matters relating to growth and development through 2030."

The Project site is not within a designated planned land use. However, it is located within the Carson River – designated River Corridor, between designated planned Industrial and Agriculture land uses. The purpose of Churchill County's industrial designation is to "provide for industrial activities and land uses that have the most potential for impacting adjacent land uses and infrastructure," and the agricultural designation is "intended to preclude premature development of rural land on the fringes of the urban area while protecting the environment..." (Master Plan 2010). According to the Churchill County Planning Director, no future developments are planned within the study area (Johnson 2013).

3.2.5 VEGETATION AND SPECIAL-STATUS PLANTS

Available vegetation data, primarily from public remote sensing sources, was reviewed within a 1-mile buffer around the Project site boundary. Field reconnaissance was conducted within the Project site and adjacent areas, and included a spring-fed wetland and nearby portions of the Carson River. Data on special-status species from the Nevada Natural Heritage Program (NNHP) were requested and reviewed for the study area and for Churchill County.

3.2.5.1 EXISTING ENVIRONMENT

The Project site is located in the Great Basin, a portion of the Basin and Range physiographic province. The Great Basin is a large interior drainage with numerous wide valleys separated by mountain ranges. The prehistoric Lake Lahontan once filled many of the valleys in western Nevada, including the study area, before drying up after the last ice age. Soils in the study area are derived from lakebed deposits that are often saline or alkaline.

Southwest Regional Gap Analysis Project (SWReGAP) mapped the majority of vegetation in the study area as Intermountain Basins Mixed Salt Desert Scrub (U.S. Geological Survey National

Gap Analysis Program 2004). Nearby, but outside the Project site, some areas were mapped as Intermountain Basins Greasewood Flat, with native and introduced wetland and riparian vegetation at a nearby spring and along the Carson River. Very small amounts of other shrub-dominated communities were also mapped as present in the study area. The Nevada Wildlife Action Plan notes that Intermountain Cold Desert Shrub, which includes all upland vegetation within the study area, is the most extensive habitat in Nevada (Wildlife Action Plan Team 2012).

3.2.5.2 INVENTORY

Vegetation within the Project site boundary is almost uniformly dominated by Shadscale (Atriplex confertifolia), with small numbers of Greasewood (Sarcobatus vermiculatus), Rubber Rabbitbrush (Ericameria nauseosa), and Jointfir (Ephedra sp.). South of the existing substation, a spring supports a small patch of riparian vegetation and a wetland that follows a drainage toward the Carson River. Riparian trees included Fremont Cottonwoods (Populus fremontii), Willow (Salix sp.), and Saltcedar (Tamarix sp.).

Although no records of special-status plants were found in the NNHP database from within the study area, the Sagebrush Cholla (Grusonia pulchella) was reported from Churchill County and was expected to occur within the Project site, based on range and habitat requirements. One Sagebrush Cholla was found within the Project site. Notice and permits are required prior to the removal of any cacti for commercial purposes in the State of Nevada (Nevada Statutes Title 47, Chapter 527).

3.2.6 VISUAL RESOURCES

Per direction of the Reclamation Resource Management Plan Guidebook: Planning for the Future (2003), the visual resource study was based on the BLM's Visual Resource Management (VRM) System (BLM Manual 8410-01, January 1986) and addresses the potential visual effects of the proposed Project on landscape scenic quality and key observation points (KOP). No BLM lands are affected by this Project, and so VRM classifications are not applicable. The visual resource inventory focused on the determination of scenic quality, identification of KOPs, and viewing conditions within the study area. Data were collected from areas adjacent to the Lahontan Substation, within a 1-mile radius, from existing land use plans, aerial photography, BLM data, and field review. Following is a description of the existing Project setting, scenic quality, viewing locations, and KOPs pertaining to the Project study area.

3.2.6.1 PROJECT SETTING

The Project site is located in the Great Basin section of the Basin and Range physiographic province (Fenneman 1931), which is characterized by isolated, roughly parallel mountain ranges that are separated by closed desert basins. The predominant vegetation identified by Brown (1994) is Great Basin Desertscrub, which includes species of Sagebrush (Artemisia sp.) and Saltbush (Atriplex sp.). The Project site is located on the edge of the Lahontan Reservoir and the Lower Carson River, where vegetation is sparse with Saltbush and smaller shrubs.

Cultural modifications that have altered the natural landscape setting include a designated BLM-utility corridor with a 60-kV transmission line, US 50, the Lahontan Dam and its associated infrastructure (including the warehouse, Parks employee housing, and the existing substation), residential dwellings within the study area, and agricultural lands along the Carson River. The

reservoir is within the LSRA, a high-use recreational area with campsites, wildlife-viewing areas, and boat launches.

3.2.6.2 SCENIC QUALITY

Scenic quality is a measure of the aesthetic value of a specific area of land defined by: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. Scenic quality designations are categorized into three classes: A (outstanding), B (above average), and C (common). The proposed Project is located within Class C scenery, as characterized by flat to gently rolling topography with cultural modifications that includes an unpaved road, the existing substation, and structures associated with the substation operations. Class B landscapes are associated with the Lower Carson River/riparian corridor and the Lahontan Reservoir located southwest of the Project site.

3.2.6.3 VIEWING LOCATIONS AND KEY OBSERVATION POINTS

The viewing location and KOP inventory included three components: (1) the identification of key public viewing locations and visual sensitivity, (2) distance zones, and (3) viewing conditions (i.e., neutral, superior, inferior). Viewing locations and KOPs are inventoried as residential, recreation, or travel route viewers as described below.

Residential

Residential viewers within the study area are inventoried as high-sensitivity due to long viewing duration and concern for aesthetics. Residences in the Parks employee housing are considered permanent housing and will be treated as such for this report as well as for KOP 1. Park property residences will have slightly superior views of the Project with partially obstructed views within .25 miles. Screening will occur due to medium vegetation and the dense clustering of structures around the residences. Residences along Spring Flower Lane approximately 0.5 mile to the northeast would have level, unobstructed views of the project site. Similar views are anticipated for the residences located 0.5 to 1 mile east-northeast of the Project site.

Recreation

The Lahontan Reservoir is within the LSRA. This recreation area was inventoried as a high sensitivity viewing location and KOP (KOP 2) because of its high-use and presence of several recreation facilities. Long viewing durations are anticipated for viewers at campsites, wildlife-viewing areas, and picnic areas; whereas boat-launch sites or parking lots may have a moderate viewing duration. Although inferior views of the Project may occur from these locations, partial screening may occur due to the presence of existing structures, topography, and vegetation. Views from the parking lot and camping area east of the lake are partially screened by topography and vegetation. Views from the Carson Riverbank and associated parking area are partially to fully screened due to vegetation and topography.

Travel Route

US 50 is a designated Auto Tour Route for two National Historic Trails: the Pony Express and California Trail. This travel route was inventoried as a high-sensitivity viewing location and KOP (KOP 3) because of its National Historic Trail designation. West-bound travelers would have neutral, unobstructed views of the Project site, whereas east-bound travelers would have

views that would be screened due to topography. The viewing duration for these travel route viewers is anticipated to be short due to the high rate of vehicular speed (50 mph or greater).

3.2.7 WATER RESOURCES

3.2.7.1 SURFACE WATER

The proposed Project is within the Carson Valley hydrographic area, which is located within the Carson River Watershed. The Project site boundary is located approximately 650 feet from the Lower Carson River (at an elevation 30 feet lower than the Project site), approximately 1,800 feet from the Lahontan Reservoir (at generally the same elevation), and 300 feet from the Truckee Canal (with the Project being 15 feet below the elevation of the canal bank). The Carson River main stem is 131 miles long and originates in the Sierra Nevada Mountains west of the Project site and terminates into the Carson Sink east of the Project site, with an average annual flow of 363,668 cubic feet per second, as measured at the Lahontan Dam (Carson Water Subconservancy District 2007). The Lahontan Reservoir is fed by the Carson River with supplemental flows from the Truckee Canal and outflows at the dam, located on the east side of the reservoir. With the construction of Lahontan Dam, the storage capacity of Lahontan Reservoir at the spillway level is 289,721 acre-feet and with the addition of 20-inch flashboards will hold 312,984 acre feet. The reservoir has a surface area of approximately 12,000 acres and is managed by the Truckee-Carson Irrigation District, primarily as irrigation supply, with hydroelectric power and recreation as secondary functions.

3.2.7.2 GROUNDWATER

Groundwater is the primary water supply source for the watershed. Within Carson Valley, the perennial yield is 49,000 acre feet per year (Carson Water Subconservancy District 2007). The groundwater basin is defined by three total aquifers with a groundwater movement toward the Carson River from both sides of the valley. Two of the aquifers are alluvial in construct, which results in a high storage capacity of high-quality groundwater.

3.2.7.3 WETLANDS

Wetland habitats (defined as lowland areas that are inundated or saturated by surface or groundwater that supports vegetation typically adapted for life in saturated soil conditions) are critical for a wide variety of resident and migratory wildlife and fish species. The proposed Project is located within the Carson Valley hydrographic area and the Project site boundary is located approximately 650 feet from the Lower Carson River. A low-lying drainage located within the southern edge of the Project boundary, directly south of the existing substation, appears to exhibit wetland conditions. There is an apparent seep or spring that keeps the soils saturated to the point of supporting wetland vegetation; however, the wash area is not identified as a wetland according to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory.

The primary soil type within the proposed Project site is the Bango-Hawsley association. Neither component soil making up the association is typically associated with wetlands as they are both well-drained soils. The plants within the drainage area include:

- Saltcedar (Tamarix sp.)
- Rush (Juncus sp.)

- Russian Olive (Elaeagnus angustifolia)
- Fremont Cottonwood (Populus fremontii)
- Willow (Salix sp.)
- Bermuda Grass (Cynodon dactylon)
- Cattail (Typha sp.)

Based on the information available, the wash area is more consistent with a wet meadow located within the floodplain or a small seep wetland that does not appear to surface drain into the Carson River; thus it is too small to be documented by the National Wetlands Inventory.

3.2.8 WILDLIFE AND SPECIAL-STATUS WILDLIFE

Publically available wildlife information was reviewed for the western Great Basin and vicinity of the proposed Project site, including information on lands managed for wildlife. Special-status wildlife species addressed in this section include those listed under the ESA, species that are proposed or candidates for ESA listing, and species listed as threatened, sensitive, or protected by the State of Nevada. Data on special-status species from the NNHP were requested and reviewed for the study area, and publically available special-status species lists from the USFWS and NNHP were reviewed for Churchill County.

3.2.8.1 EXISTING ENVIRONMENT

The western Great Basin is a relatively cold, high-elevation desert. Upland vegetation communities are often low in plant and animal species diversity relative to other North American deserts. However, streams and rivers flowing into the Great Basin from the Sierra Nevada provide permanent sources of water. The Carson River was dammed to form the Lahontan Reservoir, after which it flows into the Carson Sink. River flows support agriculture in the Carson Sink, but excess flow and agricultural runoff form a complex of saline wetlands east of the Project site. Portions of these wetlands are protected in the Stillwater and Fallon National Wildlife Refuges, and the Carson Sink is recognized as an important bird area by the National Audubon Society.

3.2.8.2 INVENTORY

No special-status species were observed during a reconnaissance survey within the site boundary. Two mammal species, 25 bird species, 4 reptile species, and 1 amphibian species were observed within or near the Project site. No fish occur within the site boundary; however, several species of introduced game fish are present in Lahontan Reservoir and the Carson River within the study area.

No ESA-listed species known to occur in Churchill County are expected to occur in the Project site. Species that may occur in vegetation types present in the study area and that are reported to occur in Churchill County include:

- Spotted Bat (Euderma maculatum) – Nevada Threatened Mammal
- Pallid Bat (Antrozous pallidus) – Nevada Protected Mammal
- Fringed Myotis (Myotis thysanodes) – Nevada Protected Mammal
- Mexican Free-tailed Bat (Tadarida brasiliensis) – Nevada Protected Mammal
- Townsend's Big-eared Bat (Corynorhinus townsendii) – Nevada Sensitive Mammal

- Western Red Bat (Lasiurus blossevillii) – Nevada Sensitive Mammal
- Pale Kangaroo Mouse (Microdipodops pallidus) – Nevada Sensitive Mammal
- Yellow-billed Cuckoo (Coccyzus americanus) – ESA proposed, Nevada Sensitive Bird
- Loggerhead Shrike (Lanius ludovicianus) – Nevada Sensitive Bird
- Sage Thrasher (Oreoscoptes montanus) – Nevada Sensitive Bird
- Brewer's Sparrow (Spizella breweri) – Nevada Sensitive Bird
- Northern Leopard Frog (Lithobates pipiens) – Nevada Protected Amphibian

The Yellow-billed Cuckoo is a candidate for ESA listing that has historically occurred in Churchill County. However, the species has been absent from central Nevada in recent decades (USFWS 2009). Two special-status wildlife species, the Pallid Bat and Northern Leopard Frog, were reported by the NNHP to potentially be present within the study area. Habitat for the Northern Leopard Frog may be present in a small wetland partially within the site boundary. No roosting habitat is present for the Pallid Bat within the site boundary, although the species may forage in a variety of habitats.

Special-status bat species recorded in Churchill County may forage within the site boundary, but no suitable roosting habitat is present. The Pale Kangaroo Mouse, Loggerhead Shrike, Sage Thrasher, and Brewer's Sparrow may be widespread throughout the study area, and may occur within the site boundary.

3.2.9 AIR QUALITY AND NOISE

Churchill County, Nevada is not a U.S. Environmental Protection Agency (EPA)-designated nonattainment area (EPA 2014). The Nevada Division of Environmental Protection (NDEP) and the Nevada Air Pollution Control Program (NAPCP) collect data through an ambient air quality monitoring network for Nevada's 15 rural counties, which includes Churchill County. The closest monitoring site to the Project site is in Fallon, Nevada. Currently, active monitoring of only PM10 and O3 is occurring at the Fallon monitoring site. Neither of these pollutants have exceeded national ambient air quality standards (NDEP 2010).

Due to the rural location of the Project site, there are relatively few human-caused generators of noise. Vehicular traffic and activities at the nearby residences or Parks maintenance activities are the greatest causes of noise in the Project site.

3.2.10 CLIMATE CHANGE

Climate change implies a significant change having important economic, environmental, and social effects in a climatic condition such as temperature or precipitation. Climate change is generally attributed directly or indirectly to human activity that alters the composition of the global atmosphere, additive to natural climate variability observed over comparable time periods.

Greenhouse gases in the atmosphere allow short wavelength solar radiation to pass through the atmosphere to reach the earth's surface, but absorb the longer wavelength heat that is radiated back into the atmosphere from the earth. The concentration of greenhouse gases in the atmosphere has an effect on the average temperature at the surface of the earth. If the atmospheric concentration of the greenhouse gases decreases over time, then more heat will escape through the atmosphere, and the average temperature at the earth's surface will go down.

If the greenhouse gas concentration in the atmosphere increases, however, less heat will escape to outer space and the average temperature at the earth's surface will increase.

The greenhouse gas of interest in the proposed Project is carbon dioxide (CO2) because it is a combustion product of vehicle and equipment fuel burning. The Project would produce greenhouse gases during the approximate six month period of construction.

3.2.11 ENVIRONMENTAL JUSTICE

Executive Order No. 12898, Environmental Justice, requires each federal agency to achieve environmental justice as part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects, including social and economic effects, of its programs, policies, and activities on minority and low-income populations. EPA guidelines for evaluating potential adverse environmental effects of projects require identification of minority populations when a minority population either exceeds 50 percent of the population of the affected area or represents a meaningfully greater increment of the affected population than of the population of some other appropriate geographic unit. The closest population to the Project includes Parks employee housing within 0.25 miles and residences along Spring Flower Lane, approximately 0.5 miles to the northeast.

The race, ethnic, and poverty data reported in this section were acquired from the U.S. Census Bureau's American Community Survey (U.S. Census 2010) and represent data collected between 2007 and 2011. The proposed Project is located in census tract 9507 in Churchill County, Nevada which includes 5,884 of the county's total population of 26,004. The poverty level was based on the Office of the Assistant Secretary for Planning and Evaluation's 2014 Poverty Guidelines.

As shown in Table 3-2, the Project site is located in an area with a smaller percentage of minorities and households below poverty level than the rest of Churchill County. Environmental justice is not affected by the proposed Project.

Table 3-2. Race, Ethnicity, and Poverty in Churchill County, Nevada and Census Tract 9507 (Percent of Total Population)

	White Alone and Not Hispanic	Total Racial and Ethnic Minorities	Households Below Poverty Level
Churchill County	75.7	24.3	19.1
Census Tract 9507	84.4	15.6	18.5

Chapter 4 – Environmental Consequences

4.1 Introduction

This chapter is an evaluation of the potential environmental effects of the proposed action (see Chapter 2) and the No Action alternative. This analysis includes likely effects on the human environment, including those that are short-term or long-term, direct or indirect, and cumulative.

4.2 Predicted Effects on Each Relevant Issue and Resources

4.2.1 CULTURAL AND ARCHAEOLOGICAL RESOURCES

4.2.1.1 PROPOSED ACTION

Reclamation identified one historic property within the APE, the Fallon Cutoff segment (CrNV-03-5419), and multiple historic properties adjacent to the APE and related to the Newlands Project (Lahontan Dam and Power Plant, Truckee Canal, Lahontan Dam government camp, and Lahontan City). Reclamation applied the criteria of adverse effect and Secretary of Interior Standards to the historic properties. The criteria for adverse effect are located at 36 CFR §800.5(a)(1). The section states: "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable affects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative."

Proposed Project-related construction involves direct ground, and potential indirect setting and viewshed effects related to the construction and removal of substation facilities and supporting infrastructure (i.e., access roads, transmission poles). Although located within the Project APE and crossed by both existing and planned 60-kV power lines, the Fallon Cutoff segment (CrNV-03-5419) will not be adversely affected by the Project. The proposed access road for the new substation would extend eastward from the graveled road located along the western side of the APE, avoiding use of Cadet Road altogether. This road currently accesses the LSRA shop and additional facilities farther south on the Carson River.

Indirect effects, largely visual in nature, to all the resources above and in Section 3.2.1 are considered to be minimal, given the amount of development in the area, and the fact that power transmission infrastructure has long been an element of the local landscape as well as a subordinate component of the Newlands Project.

In summary, based on all of the available information, Reclamation finds the overall Project will result in a finding of no adverse effect to historic properties pursuant to 36 CFR §800.5(b). Reclamation initiated consultation with the Nevada State Preservation Office (SHPO) by letter

and SHPO responded July 22, 2014, concurring with Reclamation's determination of no adverse effect to historic properties.

In the event of an unanticipated discovery of unknown cultural resources during construction activities, Reclamation will be immediately notified and any ground-disturbing activities within 50 feet of the discovery will be stopped until the find can be inspected by a qualified archaeologist, and avoidance or recovery measures can be developed in consultation with Reclamation, as outlined at 36 CFR §800.13. Work will not resume at that specific location until authorized by Reclamation.

4.2.1.2 NO ACTION ALTERNATIVE

No changes to cultural and archaeological resources within the study area would result from project activities through implementation of the No Action alternative.

4.2.2 INDIAN TRUST ASSETS

No land or trust income resources would be affected by the proposed or No Action alternatives, as the two reservations are not in the proximity of the proposed Project Site.

4.2.3 GEOLOGY RESOURCES

4.2.3.1 PROPOSED ACTION

Geologic Hazards

The potential for geologic hazards, such as earthquakes, to impact the Project site is low. Damage to the substation from ground shaking as a result of earthquakes represents the most significant geologic hazard to Project components. Although large earthquakes (above 5.0 M) have not been recorded near the Project site, there are Quaternary faults present within 1 mile of the Project that have the potential for earthquakes in the future.

Site-specific geotechnical and seismic conditions would be appropriately addressed during the design and construction of the proposed Project. In accordance with the National Electrical Safety Code, the Project would be designed and constructed to withstand geologic hazards by taking seismicity and fault locations into consideration.

Mineral Resources

The Project site does not include any mineral resource locations; therefore, there would be no Project-associated impacts on these resources.

Soil Resources

Impacts on soil resources are linked to ground disturbing activities that would be closely associated with vegetation clearing and grading of the substation site, access road, and transmission pole locations. Proper mitigation measures would be required during construction of the Project in order to avoid or minimize damage resulting from erosion and to prevent acceleration of soil erosion beyond natural levels. Due to the potential for impacts and because the Project disturbance area is greater than one acre, a NPDES general stormwater permit for construction activities is required. The NPDES permit requires the preparation and

implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would define the BMPs required for the Project in order to mitigate impacts to soils and groundwater.

4.2.3.2 NO ACTION ALTERNATIVE

No changes to geologic resources within the study area would result through implementation of the No Action alternative.

4.2.4 LAND USE

4.2.4.1 PROPOSED ACTION

The proposed action presents a minimal direct land use impact within the study area, because the proposed Project site, access road, and transmission structure locations are located on land which is currently vacant and adjacent to the existing substation site and transmission lines. The existing substation site fenced area would be available to Parks for storage after substation components were removed. Construction activities may temporarily impact the use of other existing land uses in the immediate area, such as recreation access. Impacts are expected to be minimal, short-term, and limited to the study area.

4.2.4.2 NO ACTION ALTERNATIVE

No changes to existing or future land uses within the study area would result through implementation of the No Action alternative.

4.2.5 RECREATION

4.2.5.1 PROPOSED ACTION

Minimal changes to recreational opportunities would result through the implementation of the proposed action. Dispersed recreation would be restricted from the proposed substation site, and the existing site would remain fenced for use by Parks. Access to recreational uses within the LSRA and Carson River may be temporarily impacted by the proposed action during construction due to the presence of construction equipment.

4.2.5.2 NO ACTION ALTERNATIVE

No changes to recreational uses within the study area would result through implementation of the No Action alternative.

4.2.6 VEGETATION AND SPECIAL-STATUS PLANTS

4.2.6.1 PROPOSED ACTION

Effects

Approximately 14.8 acres of native Intermountain Basins Mixed Salt Desert Scrub would be cleared to allow construction of the proposed substation, access road, and transmission lines. Of the 14.8 acres, approximately 2.3 acres would be permanent disturbance, while the remaining work areas and transmission line pull sites would gradually recover. Intermountain Basins Mixed Salt Desert Scrub is a regionally abundant vegetation community with relatively low

species diversity. Riparian and wetland vegetation within the site boundary would not be affected by the Project.

No special-status plants would be affected by the proposed action. The single sagebrush cholla observed within the site boundary is not located in an area that would be disturbed as a result of the Project.

The following BMPs would avoid or reduce impacts to vegetation as a result of ground disturbance or noxious weeds:

- If required by Reclamation, prior to construction, NV Energy personnel will identify all noxious weeds present on the land to be included in the authorized construction site and will provide this information to Reclamation. A determination will be made by Reclamation of any noxious weeds that require flagging for treatment. NV Energy will treat the noxious weeds as required by Reclamation.
- All gravel and/or fill material will be certified as weed-free.
- All off-road equipment will be cleaned (power or high-pressure cleaning) of all mud, dirt, and plant parts prior to initially moving equipment onto lands under Reclamation's jurisdiction. Any equipment that leaves the Project site will be cleaned again prior to reentry.
- Disturbances to areas infested with noxious weeds will be avoided to the extent possible.
- Any noxious weeds on site will be avoided or removed by physical removal or an approved herbicide. Wherever possible, vegetation will be left in place. Where vegetation must be removed, it will be cut at ground level to preserve the root structure and allow for potential resprouting. Disturbed areas will be recontoured and seeded with a native weed-free seed mixture approved by Reclamation.

4.2.6.2 NO ACTION ALTERNATIVE

No impacts to vegetation within the study area would result through implementation of the No Action alternative.

4.2.7 VISUAL RESOURCES

The purpose of the visual impact assessment is to identify and characterize the level of visual change or contrast in the landscape that could result from the construction, operation, and maintenance of the proposed Project. The potential contrast resulting from the proposed Project was assessed using a methodology consistent with the BLM's Contrast Rating System (BLM Manual 8431). The visual impact analysis took into consideration contrast (as a result of introducing new facilities into the existing landscape setting), access, potential vegetation clearing, the presence of existing facilities (e.g., substations and transmission lines), distance zones, and sensitive viewers.

The visual contrast assessment was conducted by comparing landscape elements (form, line, texture, and color) of the existing landscape with the elements associated with the proposed Project, including new structures and access. Changes in landform, vegetation, and structural contrast were evaluated and assigned degrees of change in contrast, ranging from weak to strong. Visual contrast resulting from the proposed Project would be weak if: (1) an existing substation would be adjacent to the proposed Project, (2) existing access is available on flat terrain, and (3) other cultural modifications are present in the vicinity of the Project.

Following are descriptions of the potential visual impacts associated with scenic quality, and viewing locations and KOPs.

4.2.7.1 PROPOSED ACTION

Landscape Scenery (Scenic Quality)
Impacts to Class C scenery are anticipated to be low/moderate for the proposed Project because existing structures and access roads would minimize modifications to both landform and structure contrast. 14.8 acres of vegetation disturbance and removal for permanent and temporary construction areas would result in low/moderate impacts.

Viewing Locations and Key Observation Points

Residential Views

Impacts for residences located on Reclamation managed lands southwest of the proposed Project site are anticipated to be moderate/low due to (1) proposed Project views seen in context with existing modifications similar in nature, and (2) partially screened views by vegetation and other structures. Impacts are anticipated to be low/moderate for residences located directly north of the Project where unobstructed views of the Project would occur within .5 mile to 1 mile (KOP 1). Residences to the north of the Project would have level, unscreened-to-minimally-screened views of the Project; however, the Project would be viewed in the context of the utility corridor, US 50, and the existing LSRA maintenance yard, thus reducing Project contrast.

Recreation Views

High sensitivity recreation viewers within the LSRA are anticipated to have low impacts due to screening by topography associated with the Lahontan Dam and vegetation. Where visible, views of the Project would be seen in the context of the utility corridor and existing substation. Impacts to recreation viewers associated with the park picnic areas, beaches, and camp sites are anticipated to be low/moderate (KOP 2). Portions of the Project would be partially screened by topography and vegetation within 0.5 to 1 mile of recreation viewing locations and would be viewed in the context of existing structures, including the utility corridor and Lahontan Dam.

Travel Route Views

Impacts to viewers traveling on US 50 are anticipated to be low/moderate to moderate. Views of the Project for east-bound travelers would be primarily screened by topography and west-bound travelers would have unobstructed views. Although the Project would be visible to travel route viewers when immediately adjacent to the Project (within 0.5 mile), the Project would be viewed in the context of the existing utility corridor and the existing LSRA maintenance yard (KOP 3). These existing structures modify the existing landscape setting, thus reducing contrast and overall impacts to travel route viewers along US 50.

4.2.7.2 NO ACTION ALTERNATIVE
No changes to the visual resource study area would result through implementation of the No Action alternative.

4.2.8 WATER RESOURCES

4.2.8.1 PROPOSED ACTION

The potential for Project activities to impact surface water or groundwater quality is minimal. Due to the potential for impacts, and, because the Project disturbance area is greater than one acre, an NPDES general stormwater permit for construction activities is required. The NPDES permit requires the preparation and implementation of a SWPPP, which would define the BMPs required for the Project. BMPs may either be nonstructural or structural. Nonstructural BMPs include management and operational procedures regarding work activities, such as minimizing land disturbances, employing preventive maintenance, and preserving natural vegetation. Structural BMPs are physical structures designed to protect stormwater quality and could include diversions, silt fences, reseeding, and detention basins.

The BMPs for a site usually consist of the following major elements:

- Sediment controls, such as silt fence and sediment basins, that capture eroded sediment will be implemented
- Materials handling and spill prevention measures designed to prevent the release of petroleum products and other chemicals and substances into stormwater runoff will be implemented

General pollution prevention BMPs are designed to reduce pollutants introduced to runoff from ongoing operations (i.e., vehicle maintenance) and ensure that necessary operations are performed in a manner that reduces pollutants (i.e., temporary stream crossing, dewatering operations, and clear water diversion).

After implementation of site-specific BMPs, impacts to surface water, groundwater, and water quality are expected to be minimal.

Within the Project boundary, a seep is located approximately 75 feet from any proposed ground disturbance. Construction activities should not adversely affect the functionality of the seep. A 75-foot buffer zone will be maintained around the seep, appropriate protection measures will be taken, and the buffer zone will be monitored during ground disturbing activities. A subsequent SWPPP report shall include all BMPs available to help ensure protection of wetland resources.

4.2.8.2 NO ACTION ALTERNATIVE

No changes to water resources within the study area would result through implementation of the No Action alternative.

4.2.9 WILDLIFE AND SPECIAL-STATUS WILDLIFE

4.2.9.1 PROPOSED ACTION

Effects

Approximately 14.8 acres of native vegetation would be temporarily disturbed under the proposed action and of the 14.8 acres, 2.3 acres would be permanently disturbed. Although some wildlife would be present, the low diversity and productivity of vegetation within the Project site does not support a high diversity of wildlife species. Vegetation communities within the Project site are regionally abundant, and the extent of temporary and permanent disturbance

associated with the Project is not anticipated to affect local or regional populations of any species.

Direct effects may include the loss of a small number of small mammals or reptiles that may be unable to avoid construction equipment; however, birds and some mammals would typically avoid the construction area. The Project would be constructed to Avian Power Line Interaction Committee standards, and monitoring and reporting of any bird mortality from electrocution or collision would occur as specified in NV Energy's Avian Protection Plan. Indirect effects would be limited to the permanent loss of approximately 2.3 acres of vegetation that support wildlife. As discussed under Water Resources, effects to the Carson River are not anticipated; thus, no indirect effects to game fish and other aquatic species are anticipated.

Special-status bat species are anticipated to primarily forage along the Carson River and nearby wetlands, rather than the low-productivity vegetation within the site boundary. The Pale Kangaroo Mouse and special-status birds may occur within the site boundary. Preconstruction surveys for Pale Kangaroo Mouse burrows would indicate whether avoidance or relocation would be recommended. Preconstruction nesting bird surveys would take place prior to any construction activities during the nesting season, typically from March through August.

The following BMPs would avoid or reduce impacts to wildlife during construction and operation of the project:

- If required by Reclamation, pre-construction surveys of the authorized construction site and the access road will be conducted for biological resources. Potential habitat for listed species identified during the preconstruction survey will be fenced for avoidance. If avoidance is not feasible, consultation with appropriate jurisdictional agencies will be conducted prior to work in the area.
- Excavations left open overnight will be covered or fenced to prevent livestock or wildlife from falling in. All covers will be secured in place and strong enough to prevent livestock or wildlife from falling in.

4.2.9.2 NO ACTION ALTERNATIVE

No impacts to wildlife within the study area would result through implementation of the No Action alternative.

4.2.10 AIR QUALITY AND NOISE

4.2.10.1 PROPOSED ACTION

Project construction activities would produce fugitive dust and engine emissions. Ground disturbing activities which would result in fugitive dust include site preparation for the new substation site, erecting new transmission structures, removing existing transmission structures, and removing equipment from the existing substation site. Emissions from construction engines and fugitive dust would be short term and occur during the six months of construction activities.

The following BMP would avoid or reduce impacts to air quality:

- All areas subject to ground disturbance will be watered as needed to control dust.

4.2.10.2 NO ACTION ALTERNATIVE

No impacts to air quality and noise would result through implementation of the No Action alternative.

4.2.11 CLIMATE CHANGE

4.2.11.1 PROPOSED ACTION

The Project would produce greenhouse gases during the approximately six-month period of construction, through vehicle and equipment fuel burning. While potential greenhouse gas emissions from equipment during construction were not quantified, the connection between potential emissions and their ultimate potential effects on or contributions to climate change and global warming have not been precisely defined, and are not expected to produce appreciable cumulative effects to greenhouse gas emissions.

4.2.11.2 NO ACTION ALTERNATIVE

No impacts to climate change would result through implementation of the No Action alternative.

4.3 Irreversible and Irretrievable Commitment of Resources

Irreversible and irretrievable resource commitments involve the use of nonrenewable resources and the effects of use on future generations. Irreversible effects primarily result from the use or destruction of specific resources that cannot be replaced within a reasonable time frame, such as energy and minerals. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action, such as extinction of a threatened or endangered species or the disturbance of a cultural resource. Neither the proposed action nor the No Action alternative would result in a large commitment of nonrenewable resources.

Project construction would require the irretrievable commitment of fossil fuels (diesel and gasoline), oils, and lubricants used by construction equipment and vehicles. For the life of the Project, the proposed action would result in unavoidable loss of habitat, and harm or harassment of some wildlife, including special status species (but would not jeopardize the continued existence of any species); changes to soil resources resulting from the disturbance of the land surface; and loss of availability for other land uses or recreation opportunities because the other uses would be precluded.

4.4 Cumulative Impacts

4.4.1 INTRODUCTION

Cumulative impacts are those that result "from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7).

This section discusses cumulative impacts as the combination of effects to specific resources that would occur as a result of the proposed action along with other past, present, and reasonably foreseeable future actions within approximately 2 miles of Project features, identified as the

Project's region of influence. Information about past, present, and reasonably foreseeable future actions was gathered from Reclamation, the BLM's Legacy Rehost 2000 database (BLM 2013), the State of Nevada, and Churchill County through adopted plans and personal communications.

4.4.2 PAST AND PRESENT PROJECTS AND RIGHTS-OF-WAY

Projects listed in Table 4-1 are either in existence or have been formally initiated, and therefore can be addressed with a high degree of certainty.

Table 4-1. List of Past, Present, and Reasonably Foreseeable Projects and Actions				
Project Name/ Owner	**Serial Number**	**Project Description**	**Project Type**	**Project Status**
Sierra Pacific Power Co.	NVCC 0009307	Oreana to Hazen 60 kV Powerline	Right-of-Way – Power Transmission Line	Authorized
Nevada Department of Transportation	NVCC 0018095	Roadway, Ormsby-Lyon County to Leeteville to Fallon Jct. on US 50	Federal Aid Highway (Sec 17)	Authorized
Sierra Pacific Power Co.	NVN 011048	Lahontan to Fallon 69 kV Powerline	Right-of-Way – Power Transmission Line	Authorized
FERC/Truckee-Carson Irrigation District	NVN 037632	FERC License – Lahontan Dam, Power Plant and V-Canal	FERC License	Authorized
FERC/Truckee-Carson Irrigation District	NVN 03763201	FERC License – Lahontan Dam, Power Plant and V-Canal	FERC License	Authorized
Reclamation	NEV 042819	Secretarial Order - Withdrawal for the Newlands Project (formerly known as the Truckee-Carson Reclamation Project)	Withdrawal	Authorized
AT&T CRE Lease Administration	NVN 046266	Cheyenne, WY to Rancho Cordova, CA buried Fiber Optic Communication Cable	Right-of-Way –Telephone and Telegraph	Authorized
Reclamation	NVN 052425	Reclamation acquisition of former Central Pacific Railroad Right-of-Way	Acquisition – Reclamation	Authorized
Reclamation	NVN 052426	Reclamation acquisition of former Central Pacific Railroad Right-of-Way	Acquisition – Reclamation	Authorized
AT&T	NVN 066394	Silver State East Fiber Optic Project	Right-of-Way –Telephone and Telegraph	Authorized
Sierra Pacific Power Co.	NVN 076179	Fiber Optic Cable Line from Reno, NV to Spanish Fork, UT	Right-of-Way –Telephone and Telegraph	Authorized

Table 4-1. List of Past, Present, and Reasonably Foreseeable Projects and Actions				
Project Name/ Owner	**Serial Number**	**Project Description**	**Project Type**	**Project Status**
Plate Boundary Observatory, UNAVACO Inc.	NVN 079992	13 Plate Boundary Observatory sites, 1 Data Relay site	Right-of-Way – Other	Authorized
Reclamation	NVN 087247	Reclamation Acquisition of former Occidental Land and Improvement Right-of-Way	Acquisition – Reclamation	Authorized
Southern Pacific Railroad Co.	NVN 0043277	Hazen to Weeks Railroad, originally granted to NV-CA Railway	Railroad and Stations outside Alaska	Authorized
Nevada Department of Transportation	NVN 0044243	US 50, 3 miles east of Silver Springs Junction to Leeteville Junction in Churchill County, NV	Federal Aid Highway (Sec 17)	Authorized
Nevada Department of Transportation	NVN 0044957	US 50, 3 miles east of Silver Springs Junction to Leeteville in Churchill County, NV	Federal Aid Highway (Sec 17)	Authorized
Sierra Pacific Power Co.	NVN 0047256	Lahontan 60 kV Powerline	Right-of-Way – Power Transmission Line	Authorized
Sierra Pacific Power Co.	NVN 0065475	Lahontan Dam to Hazen 69 kV Powerline	Right-of-Way – Power Transmission Line	Authorized
FERC – Federal Energy Regulatory Commission				

4.4.3 REASONABLY FORESEEABLE FUTURE ACTIONS

Based on the review of planning documents and personal communications with representatives from Reclamation, BLM, State of Nevada, and Churchill County, no known developments or actions are planned within the region of influence.

4.4.4 CUMULATIVE EFFECTS

Cumulative effects would result from the implementation of the proposed action along with the other past and present actions listed in Table 4-1. The majority of actions within the region of influence include linear rights-of-ways such as 60 kV transmission lines, fiber optic lines, highways, the railroad, and the Truckee Canal. The FERC licensing of the Lahontan Dam and power plant are site-type facilities within the region of influence. The proposed action includes the construction of a new substation and associated transmission lines, and the deconstruction

and removal of the existing substation and transmission lines. The upgraded substation and transmission line facilities would be within 200 feet of the existing facilities and when the existing facilities are removed, the fence and gravel substation yard would be the only elements that remain. Due to the nature of the replacement Project, the majority of impacts would result from the 14.8 acres of temporary construction disturbance, and the 2.3 acres of permanent ground disturbance associated with the new substation site and associated facilities.

Due to the absence of reasonably foreseeable future actions, the cumulative impacts analysis consists of the incremental impact of the proposed Project on past and present actions. Cumulative impacts to cultural and archaeological resources could occur if unanticipated discoveries were made during construction activities, however, based on the detailed Class III cultural inventory, cultural resource impacts are anticipated to be negligible. Cumulative visual impacts are related to the introduction of new facilities into the landscape, ground disturbance, the presence of existing facilities, and sensitive viewers. Cumulative impacts from the Project would be reduced because the new facilities would replace existing facilities and there are similar types of industrial and utility facilities in the area of influence.

Based on the relatively small permanent ground disturbance (2.3 acres), the temporary construction activity period, and the use of BMPs, cumulative impacts to soil resources, land use, recreation, vegetation, water resources, wildlife, air quality and noise, and climate change are expected to be negligible.

Chapter 5 – Consultation and Coordination

This chapter describes the consultation and coordination activities Reclamation has carried out with interested agencies, organizations, tribes, and individuals while preparing the EA. The NEPA and CEQ regulations require the public's involvement in the decision-making process, as well as allow for full environmental disclosure. Copies of the letters and the mailing list are included as an appendix to this document.

Scoping letters for the EA were mailed to interested parties and tribes on October 24, 2013. The letter announced the preparation of an EA and requested comments on the proposed Project. One comment letter was received during Scoping from the NPS. The comment provided by the NPS National Trails Intermountain Region Archaeologist verified the location of the California National Historic Trail in relation to the Project, called attention to additional potential cultural resources within the Project vicinity, and noted that any trail remnant in that area would have likely been destroyed by previous development.

The Draft EA was provided for a 15-day public review and comment period on May 14, 2014, at US Bureau of Reclamation, Mid-Pacific Region website, at the Churchill County Library, and at the Bureau of Reclamation, Lahontan Basin Area Office which is located in Carson City, Nevada. A news release was issued and a notice of availability was sent to those on the mailing list. No new comments were received during the comment period.

Chapter 6 – List of Preparers

6.1 Document Preparers and Reviewers

Preparation of this EA was an interdisciplinary team effort. Specialists from Reclamation have reviewed and approved the analysis contained within this EA, as well as provided document preparation oversight. The following section lists the individuals involved in the preparation of this EA.

Table 6-1. List of Preparers

Name	Agency/Organization	Project Role/Professional Expertise
Jennifer Birri	Bureau of Reclamation	Agency Project Manager/Water and Lands Specialist
BranDee Bruce	Bureau of Reclamation	Architectural Historian
Scott Williams	Bureau of Reclamation	Archaeologist
Julia Long	Bureau of Reclamation	Natural Resources Specialist
Bob Edwards	Bureau of Reclamation	Manager, Resources Division
Lee Simpkins	NV Energy	Proponent Environmental Team Leader
Lila Yocom	NV Energy	Proponent Project Manager
Newton DeBardeleben	EPG	Contractor Project Director
Devin Petry	EPG	Contractor Project Manager, Land Use and Recreation
Chelsa Johnson	EPG	Visual Resources
Conrad Langley	EPG	Visual Resources, Water Resources
David Kahrs	EPG	Vegetation and Special Status Species, Wildlife and Special Status Species
Matt Sauter	EPG	Geology Resources

Chapter 7 – References

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Appendix A Scoping Letter and Mailing List

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October 24, 2013

LO-650
ENV-6.00

The Honorable Len George
Chairman
Fallon Paiute-Shoshone Tribe
565 Rio Vista Drive
Fallon, Nevada 89406

Subject: Public Scoping Notice for the National Environmental Policy Act Process for the Lahontan Substation Rebuild and Upgrade Project in Churchill County, Nevada

Dear Chairman George:

The Bureau of Reclamation invites you to participate in the public scoping process and is soliciting comments for the preparation of an environmental assessment (EA) for the proposed Lahontan Substation Rebuild and Upgrade Project. This letter is a request for comments, concerns, or issues as they relate to this proposed project.

NV Energy has applied to Reclamation for a right-of-way to rebuild the Lahontan Substation on a new site approximately ½ mile northeast of Lahontan Dam and approximately 200 feet to the northeast of the existing substation, on land under Reclamation jurisdiction in Churchill County, Nevada. Upon project approval and once the new substation is constructed, the existing Lahontan Substation would be abandoned and the infrastructure removed. Reclamation is preparing an EA to assess the potential environmental impacts resulting from the proposed project. The EA will form the basis for Reclamation's decision to issue or deny the right-of-way grant requested by NV Energy. A project area map is enclosed.

The existing Lahontan Substation serves the electrical needs of the Fallon, Nevada area, including the Fallon Paiute-Shoshone Tribe. Constructed in the 1950s, the substation is beyond its useful life. As such, upgrades to the substation are necessary to more reliably serve its customers in the Fallon area.

Reclamation encourages your participation in this scoping process. Written comments may be submitted through November 22, 2013, by mail to Ms. Julia Long, Bureau of Reclamation, 705 N. Plaza Street, Suite 320, Carson City, Nevada 89701, or faxed to 775-882-7592, or e-mailed to jlong@usbr.gov. For additional information, please contact Ms. Long at 775- 884-8372.

Sincerely,

Kenneth L. Parr
Area Manager

Enclosure

cc: Ms. Athena Brown (Hand Deliver)
Superintendent
Bureau of Indian Affairs
Western Nevada Agency
311 E. Washington Street
Carson City, Nevada 89701

Mr. Mervin Wright
Tribal Resource Manager
Fallon Paiute-Shoshone Tribe
8820 Mission Road
Fallon, Nevada 89406

Ms. Cathy Wilson
Water Rights Specialist
Bureau of Indian Affairs
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Division of Natural Resources, MS-460
2600 N. Central Ave., 4th Floor
Phoenix, Arizona 85004

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NV Energy - Lahontan Substation

Rebuild and Upgrade Project
Project Area Map

RECLAMATION
Managing Water in the West

Lahontan Basin Area Office
705 N. Plaza Street, Carson City, NV 89701

October 24, 2013

LO-650
ENV-6.00

Interested Parties (See Enclosed List)

Subject: Public Scoping Notice for the National Environmental Policy Act Process for the Lahontan Substation Rebuild and Upgrade Project in Churchill County, Nevada.

Dear Ladies and Gentlemen:

The Bureau of Reclamation invites you to participate in the public scoping process and is soliciting comments for the preparation of an environmental assessment (EA) for the proposed Lahontan Substation Rebuild and Upgrade Project. This letter is a request for comments, concerns, or issues as they relate to this proposed project.

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The existing Lahontan Substation serves the electrical needs of the Fallon, Nevada area, including the Naval Air Station. Constructed in the 1950s, the substation is beyond its useful life. As such, upgrades to the substation are necessary to more reliably serve its customers in the Fallon area.

Reclamation encourages your participation in this scoping process. Written comments may be submitted through November 22, 2013, by mail to Ms. Julia Long, Bureau of Reclamation, 705 N. Plaza Street, Suite 320, Carson City, Nevada 89701, or faxed to 775-882-7592, or e-mailed to jlong@usbr.gov. For additional information, please contact Ms. Long at 775- 884-8372.

Sincerely,

Kenneth L. Parr
Area Manager

Enclosure

WBR:JLong:kgibson:10/22/13:775-884-8372
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INTERESTED PARTIES

Mr. Ted Koch
State Supervisor
U.S. Fish and Wildlife Service
1340 Financial Blvd., Suite 234
Reno, Nevada 89502

Mr. Eric Johnson
Acting Administrator
Nevada Division of State Parks
901 S. Stewart St., Suite 5005
Carson City, Nevada 89701

Mr. Skip Canfield
Nevada State Clearinghouse
Dept of Conservation & Natural Resources
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Carson City, Nevada 89701

Mr. Rusty Jardine
District Manager
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Archaeologist
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Fallon, Nevada 89406

Union Pacific Railroad
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Omaha, Nebraska 68179-1690

NV Energy - Lahontan Substation

Rebuild and Upgrade Project
Project Area Map

RECLAMATION
Managing Water in the West

Lahontan Basin Area Office
705 N. Plaza Street, Carson City, NV 89701