3.17 Native American Traditional Values

3.17.1 Affected Environment

Ethnographic resources are associated with the cultural practices, beliefs, and traditional history of a community. Examples of ethnographic resources include places in oral histories or traditional places, such as particular rock formations, the confluence of two rivers, or a rock cairn; large areas, such as landscapes and viewscapes; sacred sites and places used for religious practices; social or traditional gathering areas, such as dance areas; natural resources, such as plant materials or clay deposits used for arts, crafts, or ceremonies; and places and natural resources traditionally used for non-ceremonial uses, such as trails or camping locations.

The study area and cumulative effects study area (CESA) for effects to Native American traditional values encompasses an area extending 7.7 miles north, 6.2 miles south, 8.6 miles east, and 4.3 miles west of the East Pit (**Figure 3.16-2**). The boundary of the CESA was determined based on the distribution of Tosawihi material, and includes places where Tosawihi material was procured and used by the Western Shoshone. Past and present actions and reasonably foreseeable future actions (RFFAs) are described in Section 3.2.

3.17.1.1 Regulatory Framework

Federal laws, regulations, and agency guidance require the Bureau of Land Management (BLM) to consult with Native American tribes concerning the identification of cultural values, religious beliefs, and traditional practices of Native American people that may be affected by actions on BLM-administered lands. This consultation includes the identification of places (i.e., physical locations) of traditional cultural importance to Native American tribes. Places that may be of traditional cultural importance to Native American people include, but are not limited to:

- Locations associated with the traditional beliefs concerning tribal origins, cultural history, or the nature of the world;
- Locations where religious practitioners go, either in the past or the present, to perform ceremonial activities based on traditional cultural rules or practice;
- Ancestral habitation sites;
- Trails;
- Burial sites; and
- Places from which plants, animals, minerals, and waters possessing healing powers or used for other subsistence purposes, may be taken.

The 1992 amendments to the National Historic Preservation Act (NHPA) place major emphasis on the role of Native American groups in the Section 106 review process. Subsequent revisions to the regulations of the Advisory Council on Historic Preservation published in May 18, 1999, incorporate specific provisions for federal agencies to involve Native American groups in land or resource management decisions and for consulting with these groups throughout the process. Before making decisions or approving actions that could result in changes in land use, physical changes to lands or resources, changes in access, or alienation of lands, federal agencies must determine whether Native American interests would be affected, observe pertinent consultation requirements, and document how this was done. Tribal participation in the Section 106 process, including the use of tribal monitors, is designed to identify properties of cultural or religious significance, as well as to offer solutions to eliminate or reduce potential adverse effects.

The NHPA also was amended to explicitly allow that "properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization may be determined to be eligible for inclusion on the NRHP." If a resource has been identified as having importance in traditional cultural practices and the continuing cultural identity of a community, it may be considered a traditional cultural property (TCP). The term "traditional cultural property" first came into use within the federal legal framework for historic preservation and cultural resource management in an attempt to categorize historic properties containing traditional cultural significance. To qualify for eligibility to the National Register of Historic Places (NRHP), a TCP must:

- Be more than 50 years old;
- Be a place with definable boundaries;
- Retain integrity; and
- Meet certain eligibility criteria as outlined for cultural resources in the NHPA (see Section 3.16, Cultural Resources).

In addition to NRHP eligibility, some places of traditional religious and cultural importance also must be evaluated to determine if they should be considered under other federal laws, regulations, directives, or policies. These include, but are not limited to, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, American Indian Religious Freedom Act (AIRFA) of 1978, Archaeological Resources Protection Act (ARPA) of 1979, and Executive Order (EO) 13007 (Sacred Sites) of 1996.

NAGPRA established a means for Native Americans, including Indian tribes, to request the return of human remains and other sensitive cultural items held by federal agencies or federally assisted museums or institutions. NAGPRA also contains provisions regarding the intentional excavation and removal of, inadvertent discovery of, and illegal trafficking in Native American human remains and sensitive cultural items located on federal lands.

AIRFA established a federal policy of protecting and preserving the inherent right of individual Native Americans to believe, express, and exercise their traditional religions including, but not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.

ARPA requires notification of the appropriate Indian tribe before approving a cultural resource use permit for the excavation (testing and data recovery) of archaeological resources, if the responsible federal land manager determines that a location having cultural or religious importance to the tribe may be harmed or destroyed. In Nevada, ARPA permits issued by the Nevada BLM State Office required tribal consultation.

EO 13007 requires federal agencies to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of these sites. To implement these requirements, federal agencies must where practicable and appropriate implement procedures to ensure reasonable notice is provided for proposed actions or land management policies that may restrict future access to, or ceremonial use of, or adversely affect the physical integrity of sacred sites.

3.17.1.2 Tosawihi Quarries Archaeological District

The study area encompasses the Tosawihi Quarries Archaeological District (Tosawihi Quarries), which is a culturally and religiously significant area in the traditional homeland of the Western Shoshone people. The region encompassing the study area primarily was used by the *Tosawihi*

(meaning “White Knife”), a subgroup of the Western Shoshone who derived their name from the use of the white chert commonly found at the Tosawihi Quarries. *Tosawihi* Shoshone traditionally occupied the Humboldt River Valley around Battle Mountain, the lands drained by Rock Creek and other northern tributaries of the Humboldt River from as far west as Golconda or Winnemucca and east to the Independence Mountains (Rusco and Raven 1992).

Ethnographic sources and recent interviews and meetings with contemporary Western Shoshone identify the past and present importance of the Tosawihi Quarries as:

- A sacred place regarded by many Western Shoshone as a source of medicine traditionally used for power in healing, and for the protection and success in warfare;
- The location of special power spots used traditionally for vision or power quests;
- A place remembered in the oral tradition of Western Shoshone as an economically important place visited regularly on seasonal treks between the Humboldt and Snake River valleys;
- The location used to procure a highly knappable chert, as well as a large variety of both large and small game and edible plants;
- A place where numerous open camps sites and rockshelters have been documented attesting to it seasonal occupation throughout the use of the quarries;
- An area used both as a source of religiously important materials and of power that continues to be a major part of the religious practices of many Western Shoshone, particularly by those who identify themselves as descendants of the *Tosawihi*;
- The location of Tosawihi chert, which when made into a knife or other implement by a gifted healer, is known to be used in contemporary traditional religious healing rituals throughout the western United States; and
- An area that is central to the ethnic identity of the Western Shoshone; those who still visit the area to hunt or collect the medicine continually renew their ties to the area.

In 1991, several interviews and meetings with tribal groups and individuals who retain traditional, religious, and cultural ties to the Tosawihi Quarries were conducted as part of a Native American study program. The purpose of the program was to provide background information for an environmental impact statement (EIS) on proposed mining activities in the Tosawihi Quarries (Rusco and Raven 1992). At that time, the Tosawihi Quarries were recommended as eligible for inclusion on the NRHP as a TCP because of their significance to the ongoing lifeways of Western Shoshone.

In the late 1990s, the BLM initiated new consultation with the Western Shoshone regarding the potential impacts of mine groundwater pumping to seeps, springs, and streams that may hold special cultural importance to Western Shoshone traditional life ways. As a result of these efforts, two TCPs were defined, one at Rock Creek and one at Tosawihi Quarries (Hockett 1999). The Tosawihi Quarries TCP encompasses several springs, a vision quest locale, and a chert collecting area. The Tosawihi Quarries TCP also was determined eligible for the NRHP under criteria “a” and “d” (as described in Section 3.16.1.2). The Nevada State Historic Preservation Officer (SHPO) subsequently concurred with this determination. Since that time, the BLM has been in continuous contact with tribal groups and individuals, conducting formal consultation, information-sharing meetings, and field trips to the quarries.

3.17.1.3 Native American Consultation

In compliance with the NHPA, the BLM initiated government-to-government consultation for the Hollister Underground Mine Project EIS on July 30, 2009, by sending letters to the following federally recognized tribes and bands: Te-Moak Tribe of Western Shoshone, Duckwater Shoshone Tribe, Ely

Shoshone Tribe, Yomba Shoshone Tribe, Confederated Tribes of the Goshute Reservation, Battle Mountain Band Council, Wells Band Council, South Fork Band Council, Elko Band Council, and Shoshone-Paiutes Tribes of the Duck Valley Indian Reservation. Letters were sent to inform the tribes and bands of the proposed project and solicit any concerns the tribes and bands may have regarding places of cultural and religious importance or TCPs. In addition, the BLM sent letters to the Western Shoshone Defense Project, Western Shoshone Descendants of Big Smokey, and Western Shoshone Committee of Duck Valley to inform them of the project. **Table 3.17-1** lists the contacted tribes/bands and tribal organizations, and any concerns/comments regarding the proposed project.

Table 3.17-1 Summary of Native American Consultation and Communication

Name of Tribe/Band	Date of Initial Contact	Follow-up Letters/Meetings/ Field Visits	Comments/Concerns
Battle Mountain Band Council	July 30, 2009	August 31, 2009 May 20, 2010 June 15, 2010 July 11, 2011 March 16, 2012	Tribal members attending the May 20, 2010, meeting and June 15, 2010, field trip discussed protection of the Tosawihi Quarries afforded by its status as a TCP; expressed concerns with possible looting by mine employees and impacts to potential burials.
Shoshone-Paiute Tribes of the Duck Valley Indian Reservation	July 30, 2009	August 31, 2009 January 29, 2010 May 13, 2010 June 3, 2010 June 15, 2010 September 28, 2010 August 28, 2010 August 31, 2010 July 11, 2011 March 16, 2012	BLM attended Tribal Council meetings and provided details of the proposed project; previous National Environmental Policy Act (NEPA) analyses in the project vicinity; and, biological survey data for the proposed project. Tribal Council requested all mining and other activities to stop in Tosawihi Quarries. Also requested copies of final archaeological reports for the proposed project. During meetings and field visits, tribal participants discussed the importance of Tosawihi as a cultural site; expressed concerned with looting of chert deposits. Several meetings were canceled.
Elko Band Council	July 30, 2009	August 31, 2009 September 16, 2009 May 27, 2010 June 15, 2010 July 11, 2011 March 16, 2012	During the June 15, 2010, field trip, tribal participants discussed the sacredness of the Tosawihi Quarries.
Duckwater Shoshone Tribe	July 30, 2009	August 31, 2009 July 11, 2011 March 16, 2012	No comment to date.
Ely Shoshone Tribe	July 30, 2009	August 31, 2009 July 11, 2011 March 16, 2012	No comment to date.

Table 3.17-1 Summary of Native American Consultation and Communication

Name of Tribe/Band	Date of Initial Contact	Follow-up Letters/Meetings/ Field Visits	Comments/Concerns
Confederated Tribes of Goshute Reservation	July 30, 2009	August 31, 2009	No comment to date.
South Fork Band Council	July 30, 2009	August 31, 2009 July 11, 2011 March 16, 2012	No comment to date.
Te-Moak Tribe of Western Shoshone	July 30, 2009	August 31, 2009 January 6, 2010 May 27, 2010 June 15, 2010 July 11, 2011 March 16, 2012	BLM attended Tribal Council meetings and provided details of the EIS process and schedule. During May 27, 2010, meeting and June 15, 2010, field visit, tribal participants expressed concerns with possible looting by mine employees and impacts to potential burials.
Wells Band Council	July 30, 2009	August 31, 2009 May 27, 2010 July 11, 2011 March 16, 2012	During the May 27, 2010, meeting, concerns focused on potential impacts to subsurface chert deposits.
Yomba Shoshone Tribe	July 30, 2009	August 31, 2009 July 11, 2011 March 16, 2012	No comment to date.
Tribal Organizations			
Western Shoshone Defense Project	July 30, 2009	August 31, 2009 May 27, 2010 July 11, 2011 March 16, 2012	During the May 27, 2010, meeting, concerns focused on potential impacts to subsurface chert deposits.
Western Shoshone Descendants of Big Smokey	July 30, 2009	August 31, 2009 August 28, 2010 July 11, 2011 March 16, 2012	During August 28, 2009, field visit, descendants expressed concern with looting of chert deposits.
Western Shoshone Committee of Duck Valley	July 30, 2009	August 31, 2009 July 11, 2011 March 16, 2012	No comment to date.

Source: BLM 2012; Fawcett 2011; Tiley 2010.

After a tribal council meeting held on January 6, 2010, the Te-Moak Tribe of Western Shoshone submitted a resolution to the BLM on January 15, 2010, in which the tribe "demands no further activities are pursued around or near the Tosawihi Quarries to ensure preservation of Native American cultural values and promote the health, safety, and welfare of the Native American people" (Cassadore 2010).

The BLM has held five public scoping meetings to allow the public an opportunity to learn about the proposed project and its components, and to ask questions and provide comments. Meetings were

held on May 10, 11, 12, 13, and 20, 2010, in Winnemucca, Battle Mountain, Elko, Mountain City, and Owyhee, Nevada, respectively. Although several Western Shoshone individuals attended the meetings in Mountain City and Owyhee, these meetings were not government-to-government consultation. During the meetings in Mountain City and Owyhee, tribal individuals expressed the following concerns relative to the proposed project and its location within the Tosawihi Quarries:

- Damage to chert locations;
- Disturbance to cultural resources;
- Cumulative effects of groundwater pumping and potential impacts to the springs;
- Increased access to the Tosawihi Quarries; and
- Installation of the electric power transmission line (transmission line) and its potential to increased development in the area.

In addition to the public scoping meetings, the BLM held three tribal information meetings. These were held in Battle Mountain (May 20, 2010); Elko (May 27, 2010); and Owyhee (June 3, 2010). The purpose of the meetings was to provide additional information about the proposed project and allow tribal individuals an opportunity to express their concerns and ask questions relative to the proposed project. Of greatest concern to the tribal individuals were potential subsurface impacts to chert deposits due to the underground mining.

On June 15, 2010, the BLM and nine Tosawihi descendents from Owyhee, Battle Mountain, and Elko visited the project area to get an overview of the current operations and view the aboveground footprint. During the field visit, the descendents expressed concerns about possible looting by mine employees and impacts to potential burials.

On August 28, 2010, the BLM and members of the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation and Western Shoshone Descendants of Big Smokey visited the project area. Discussions during the field trip focused on plant and chert sources available in the area, and accessibility to collection areas by local tribal members. Concerns expressed by the tribal participants centered on possible looting of chert deposits, and inaccessibility to Velvet Canyon due to the road being washed out by previous rains.

The BLM sent a second letter to the tribal groups and organizations on July 11, 2011. In the letter, the BLM requested input, recommendations, concerns, and advice regarding the proposed Hollister Underground Project, and offered to meet with the tribal groups as part of the government-to-government consultation efforts. Attached to the letter were a project map, description of the proposed project, and response form for use in responding to the letter.

On March 16, 2012, the BLM sent a third letter to the tribal groups and organizations regarding government-to-government consultation. In the letter, the BLM describes the proposed action, and informs the tribal groups and organizations of the Backfill Alternative and its analysis in the EIS.

As part of the tribal consultation efforts, an ethnographic report was prepared for the Hollister Underground Mine Project (Tiley 2010). The purpose of the ethnographic report was to summarize Native American concerns regarding the proposed project and to update existing ethnographic information on Western Shoshone traditional use of the project area. Previous ethnographic documentation available online, at the BLM, and at state repositories was reviewed to develop the ethnographic overview of the area. Additionally, previous consultation between tribal governments and the BLM that has been conducted over the last 20 years for previous mining activities in and near the proposed project area was examined to provide a reference point for current tribal concerns. In order to update previous ethnographic documentation and to solicit concerns relative to

the currently proposed project, the report author met with tribal individuals, attended tribal meetings, and participated in the two field visits to the project area. The results of these data gathering efforts were summarized in the report, which was submitted to the BLM in November 2010. A public version of the report was shared with various Western Shoshone tribal governments and interested groups.

The BLM continues to provide opportunities to meet and coordinate with tribal governments and interested tribal members to address their concerns and to work together in developing appropriate measures to protect the quarries and sites of tribal importance or concern. Native American consultation and coordination is ongoing in regards to the proposed project and PA.

3.17.2 Environmental Consequences

The NEPA process does not require a separate analysis of impacts to religion, spirituality, or sacredness. As a result, references in the analysis to such beliefs or practices convey only the terminology used by participants involved in the ethnographic study and tribal consultation and coordination conducted for the proposed project. This terminology does not reflect any BLM evaluation, conclusion, or determination that something is or is not religious, sacred, or spiritual in nature, but conveys only the information that has been gathered through tribal consultation and coordination and the ethnographic study.

The project-specific issues for the effects analysis were identified based on information provided by tribal individuals during conduct of Native American consultation. Impacts to Native American traditional values would be considered significant if the Proposed Action or other alternatives would result in adverse effects to NRHP-eligible properties of traditional religious and cultural importance (including TCPs) to the tribes.

The effects of federal undertakings on properties of traditional religious and cultural importance to contemporary Native Americans are given consideration under the provisions of EO 13007, AIRFA, and recent amendments to the NHPA. As amended, the NHPA now integrates Native American tribes into the Section 106 compliance process.

3.17.2.1 Proposed Action

Potential Impacts

As previously discussed, the Tosawihi Quarries were determined eligible for inclusion on the NRHP. Big Butte and Ivanhoe, Buttercup, and Antelope springs are prominent places where spirits dwell and are recognized as TCPs. Ivanhoe and Buttercup springs and Big Butte are located north of the Tosawihi Quarries. Antelope Springs is located on the northern edge. The traditional importance of the quarries centered around three topics: medicine and power, economic pursuits, and as a focal point for ethnic identity. White chert and red and white volcanic tuff found at the Tosawihi Quarries traditionally were used medicinally by Western Shoshone. The chert was a valuable economic item both for use and for trade, and became widely distributed through trade networks. The Tosawihi Quarries has been described by contemporary Western Shoshone as the center of a larger power area and continues to be an important element of the Western Shoshone culture for medicinal, spiritual, and traditional purposes.

As a result of tribal consultation, public scoping, field tours, site visits, and interviews conducted for the ethnography report, impacts to cultural resources, graves/burials, and subsurface chert deposits, as well as groundwater drawdown impacts to springs, impacts associated with increased access, and the potential for increased development in the area as a result of installation of the transmission line were identified as concerns by tribal governments and individuals. These potential impacts are discussed in the following paragraphs. Visual and noise analyses were conducted from Big Butte because of its

status as a TCP and historically as a place to fast and pray. Details of the noise and visual analyses are described below.

Impacts to Cultural Resources (including TCPs and Properties of Traditional Religious and Cultural Importance)

Western Shoshone individuals expressed concerns about potential impacts to or loss of cultural resources related to Western Shoshone heritage within the Tosawihi Quarries. A Programmatic Agreement (PA) among the BLM, Nevada SHPO, Advisory Council on Historic Preservation, and Rodeo Creek Gold Inc is being developed for an area that encompasses the proposed project. The tribes and bands listed on **Table 3.17-1** were asked to participate in development of the PA as concurring parties. The PA outlines the steps to be taken to: 1) identify cultural resources; 2) evaluate them to determine if they are eligible for listing on the NRHP; 3) identify potential adverse effects; 4) develop measures to avoid, reduce, or mitigate adverse effects; and 5) address inadvertent discoveries. A copy of the PA was mailed to the tribes and bands (except the Confederated Tribes of Goshute Reservation), and to the Western Shoshone Committee of Duck Valley, Western Shoshone Defense Project, Western Shoshone Descendents of Big Smokey, and BIA on September 1, 2011. A copy was not mailed to the Goshute because the tribe requested not to receive information on projects located in the northwestern part of the BLM Elko District.

In consultation with the Nevada SHPO and interested Tribes, the BLM would determine whether construction and operation of the proposed project would have an adverse effect on any NRHP-eligible sites, as well as any sites of tribal concern. If the BLM determines that NRHP-eligible sites or sites of tribal concern would be adversely affected, then mitigation would be proposed in accordance with the PA. Mitigation may include, but would not be limited to, one or more of the following measures: 1) avoidance through changes in the construction or operational design; 2) data recovery, which might include the systematic professional archaeological excavation of an NRHP-eligible site; 3) the use of landscaping or other techniques that would minimize or eliminate effects on the site's setting; and 4) the development of interpretive materials. Tribal representatives would be asked to participate in the development of any data recovery or mitigation plan.

During meetings and other exchanges with the Western Shoshone, the BLM has been told that while tribal members do not like archaeological excavation (data recovery), they prefer excavation to the loss and damage of the sites due to mining or exploration without the opportunity to learn about the sites. The BLM has stressed to tribal members that archaeological treatment does not preclude other treatments to deal with non-archaeological aspects or concerns for cultural resources.

Impacts to Subsurface Chert Deposits

Previous ethnographic studies document the importance of the chert found at the Tosawihi Quarries as a valuable economic item by Western Shoshone ancestors both for use in tool manufacturing and for trade. During the public scoping meetings, tribal individuals expressed concern about potential impacts to subsurface chert deposits as a result of the proposed project. According to project geologists, subsurface chert deposits in the Tosawihi Quarries area extend approximately 10 to 100 feet below the ground surface, whereas the underground exploration and mining activities would be 500 to 2,000 feet or more below the surface. Due to the depth of mining operations versus the depth of the chert deposits, no impacts to subsurface chert deposits are expected to occur as a result of the Proposed Action.

Impacts to Potential Burials

Although burials have not been found during archaeological field investigations conducted in the study area or specified by tribal participants during consultation, members of the Elko Band and Shoshone-Paiute Tribes of the Duck Valley Indian Reservation expressed concern about the possible presence

of burials at residential sites or camps, especially in caves. Their concerns are based on the premise that increased mining activity (i.e., increased numbers of people) would increase the opportunity for looting of cultural sites, including possible burials.

In accordance with the PA, if construction or other project personnel discover what might be human remains, funerary objects, or items of cultural patrimony on federal land, then construction would immediately cease within 100 feet of the discovery, and the BLM manager would be notified of the find. In accordance with BLM policy and applicable regulations, a determination would be made regarding the cultural affiliation of any such remains, funerary objects, or other items. Any discovered Native American human remains, funerary objects, or items of cultural patrimony found on federal land would be handled according to the provisions of the NAGPRA and its implementing regulations (43 Code of Federal Regulations 10) and as stipulated in the PA. Work in the immediate vicinity of the human remains would not resume until after disposition of the human remains has been determined. The BLM would issue a notice to proceed after notification to the SHPO and consultation with appropriate tribal representatives.

If human remains and associated artifacts are discovered on non-federal land during construction activities, construction would immediately cease within the area of the discovery and the county coroner or sheriff would be notified of the find. Treatment of any discovered human remains and associated artifacts found on non-federal land would be handled in accordance with the provisions of Nevada state law.

Looting Impacts to Archaeological Resources

RCG requires site-specific cultural sensitivity training. This training includes education regarding the protection of cultural resources and is provided to all employees, contractors, and visitors to the site. Compliance with RCG's cultural resource protection policies is mandatory.

Per the PA, the BLM, SHPO, and Tribes may monitor proposed disturbance and any historic properties that remain untreated within or adjacent to the APE.

Drawdown Impacts to Springs

According to Western Shoshone beliefs, all living things depend on water, and without it, life would cease. Therefore, the drying up of springs or reduction of flow due to groundwater pumping is of great concern to the Western Shoshone who view water sources as being sacred. Drawdown from mine pumping is not expected to affect Antelope Spring, Ivanhoe Spring, or Buttercup Spring due to differences between the aquifers that support these features and the groundwater zone that seeps into the underground workings. In addition, differences in elevation and separation by geologic structures would eliminate the potential for impacts to these springs from the Proposed Action. Drawdown mainly would affect the deeper Vinni Formation, which is isolated from valley alluvium by the clayey, less permeable nature of overlying volcanic rock. Four spring complexes potentially would be affected by the Proposed Action from groundwater drawdown in the Vinni Formation. For an expanded discussion of drawdown impacts to the springs, the reader is referred to Section 3.6, Surface Water Resources and Watersheds.

Impacts Associated with Road Improvements

Tribal individuals were concerned that Little Antelope Creek Road and the Ivanhoe Road would be improved as part of the Proposed Action, which potentially would increase the numbers of people to the area and the potential for illegal collection of artifacts and inadvertent damage. Under the Proposed Action, the existing access roads, including Little Antelope Creek Road and Ivanhoe Road, would not be improved, but would be maintained.

Increased Development Due to Installation of the Transmission Line

No increased development due to the installation of the transmission line would be anticipated because the transmission line would be removed upon permanent mine closure. Poles would be cut at the base (below ground surface) and disposed of at an approved off-site location. Any two-track spur roads accessing pole sites would be scarified and seeded. Holes would be filled, covered, and reseeded with a BLM-approved seed mix.

Visual and Noise Analyses

During the meetings and field trips, tribal individuals spoke of the sacredness of Big Butte. According to several tribal individuals, Big Butte historically has been a place to fast and pray, and should be protected for the "coming generations. For kids to be somebody important, they need to receive power from places such as Big Butte on a vision quest." Due to its traditional and cultural importance to the tribes, visual and noise analyses were conducted from Big Butte.

For the visual analysis, a key observation point was established on the top of Big Butte. Results of the visual analysis indicate that the majority of the proposed project would not be visible from the top of Big Butte because the land slopes away from the viewers' attention. The most prominent project facility visible from the top of Big Butte would be the Hatter production shaft, which would be slightly over 2 miles away from Big Butte and would rise approximately 120 feet above the natural ground surface. Other project facilities would be entirely screened by the intervening terrain. RCG plans to paint the buildings to blend into the natural terrain. For an expanded discussion of visual impacts, the reader is referred to Section 3.22, Visual Resources.

Noise levels were determined from measurements taken at the base of Big Butte. Measurements ranged from 2 to 10 minutes over a period of 2 hours. In addition to measurements of ambient conditions, noise levels from generators, other mine machinery, and ore truck traffic were measured. There are two primary sources of noise associated with hard rock mining: blasting and operation of stationary and mobile equipment. Under the Proposed Action, blasting would occur underground and would not be audible on the surface. Additional equipment would be in use underground and occasionally would depart from the portal for maintenance, repair, or to haul waste rock and ore to the surface, but would not be a notable contributor to noise levels on the surface. The generators would be replaced during normal operations by the proposed transmission line, thereby reducing mine site noise emissions. Noise effects on top of Big Butte from ore trucks would be just over 40 decibels on the A-weighted scale (dBA) and the average likely would be in the low 30s dBA. For comparison, a noise level of 35 dBA is equivalent to a soft whisper heard at 6 feet away. Truck noise from the top of Big Butte would be discernible under quiet, low wind conditions, but would not be obtrusive. For an expanded discussion of noise impacts, the reader is referred to Section 3.23, Noise.

Surface Exploration

Contributing loci to the overall eligibility of the Tosawihi Quarries could be affected by surface exploration. The area proposed for surface exploration encompasses the Tosawihi Quarries. The Tosawihi Quarries consists of 172 recorded loci. Of the 172 recorded loci, 157 contribute to the overall eligibility of the Tosawihi Quarries. Of these, 156 are contributing elements under criteria A and D, and 1 is a contributing element under Criterion A. In addition to the 25 acres of authorized surface disturbance for exploration, 25 more acres of disturbance for surface exploration would be dispersed throughout the project area over the course of the 20-year mine life. Surface exploration under the Proposed Action would occur on previously approved areas. Although 25 acres is being proposed for surface exploration, for a total of up to 50 acres, disturbance could occur anywhere within the project area.

Currently, only 24 percent of the surface exploration area has been inventoried for cultural resources. As a result of previous inventories, 4 NRHP-eligible sites and the 157 contributing loci were documented within the exploration area. Prior to surface exploration, cultural resources inventories would be required for the remaining 76 percent of the surface exploration area that has not been surveyed. Ground disturbance associated with surface exploration could directly and cumulatively affect any historic properties and contributing loci identified within this area. Adverse effects to historic properties or contributing loci would be avoided or, if avoidance is not feasible, mitigated in accordance with the PA.

3.17.2.2 Mud Springs Road Transmission Line Alternative

The majority of proposed disturbance associated with the Mud Springs Road Transmission Line Alternative would be on previously undisturbed land. At this time, portions of this alternative have not been inventoried for cultural resources. For those portions previously inventoried, the inventory data indicate no known historic properties along the segment of the alternative terminating at the existing Coyote Creek Substation (North Option), and one historic property along the segment terminating at a new substation (South Option). The historic property is identified as a prehistoric lithic scatter. Total site area for the historic property is 6.5 acres. If the Mud Springs Road Transmission Line Alternative were chosen, Class III cultural resource inventories would be required for all proposed disturbance areas not previously inventoried. In addition, tribal consultation would be conducted to identify any sites of tribal concerns that may be located within the alternative transmission line corridor. TCPs would not be impacted by this alternative.

3.17.2.3 Mud Springs Road Waste Rock Storage Facility Alternative

The construction of the Mud Springs Waste Rock Storage Facility (WRSF) would disturb approximately 21 acres, 90 percent of which would be new surface disturbance. Three loci, which are contributing elements of the Tosawihi Quarries, fall within the proposed location of the Mud Springs Road WRSF; however, the locations of these loci have not been field verified as of this date. The three loci are Locus 88, Locus 93, and Locus 94. All of the loci are eligible under criteria A and D. Locus 88 consists of four quarry pits and one quarry outcrop with debitage and bifaces. Loci 93 and 94 are diffuse lithic scatters with cores, bifaces, and debitage. Total site area for the three loci is 11.4 acres. If this alternative were chosen, tribal consultation would be conducted to identify any sites of tribal concerns that may be located within the location of the WRSF. TCPs would not be impacted by this alternative.

3.17.2.4 Backfill Alternative

Previous inventories recorded five loci (27, 31, 34, 75, and 145) along the existing two-track roads to the site raises; however, the locations of these loci have not been field verified as of this date. The existing two-track roads to the raises would require upgrades to accommodate the trucks transporting rock material to be used in the raise backfilling. No loci are located within other proposed disturbance areas associated with this alternative. All of the five loci are contributing elements of the Tosawihi Quarries under criteria A and D. Loci 27, 31, and 145 consist of several quarry pits, cores, hammerstones, bifaces, and flakes. Locus 34 consists of the same artifacts as Loci 27, 31, and 145, but with the addition of a “rare” tabular ground stone piece; loci 75 is a single quarry pit. Total site area for the five loci is 22.7 acres. TCPs would not be impacted by this alternative. However, backfilling the shaft would provide an additional safety measure for individuals in the area because the risks of falling into a shaft would be minimized. The land would be restored to beneficial use.

3.17.2.5 No Action Alternative

Under the No Action Alternative, the proposed facilities that would comprise the proposed project would not be developed. No additional ground-disturbing activities beyond surface exploration, which is currently authorized, would occur. The bulk sampling and exploration activities would continue as

currently permitted. Therefore, no new effects to Native American traditional values are anticipated under the No Action Alternative.

3.17.3 Cumulative Impacts

For cumulative effects, the study area includes an area extending 7.7 miles north, 6.2 miles south, 8.6 miles east, and 4.3 miles west of the East Pit (**Figure 3.16-2**). Section 3.2 describes the past and present actions, and RFFAs. Ethnographic research, cultural resources inventories, Native American consultation efforts, and personal communication and interviews with Western Shoshone individuals have provided documentation that establishes the importance of the Tosawihi Quarries in Western Shoshone history. Archaeological data on file at the BLM supports Western Shoshone historic and prehistoric use of the CESA and is consistent with the traditional/cultural use information provided by contemporary Western Shoshone. Past and present traditional, cultural, and spiritual use information, combined with oral and written histories and the archaeology of the area, support prehistoric, historic, and modern use of the CESA by native practitioners for hundreds if not thousands of years.

Project-specific issues for Native American traditional values were identified based on information provided by tribal governments and individuals through consultation with the BLM, and through public scoping, field visits, site visits, and interviews conducted for the ethnography report. Project-specific issues identified by tribal governments and individuals and analyzed for the Proposed Action include potential effects to cultural resources, subsurface chert deposits, and burials, as well as groundwater drawdown impacts to springs, and impacts associated with road improvements and increased development due to installation of the transmission line. Impacts to subsurface chert deposits as well as impacts associated with road improvements and increased development due to installation of the transmission line would not be anticipated to occur. Therefore, no cumulative impacts would be anticipated. Cumulative impacts to cultural resources and springs are described below.

3.17.3.1 Impacts to Cultural Resources (including TCPs and Properties of Traditional Religious and Cultural Importance)

As a result of previous cultural resources inventories in the CESA, 344 sites have been previously documented within the CESA. These include 328 prehistoric sites, 6 historic sites, and 10 multi-component sites containing both a prehistoric and historic component. Of these, 72 are eligible for the NRHP, 236 are not eligible, and 36 are unevaluated. The sites primarily consist of lithic debitage, tool scatters, and debitage scatters. The lithic debitage and tool scatters contain fragments of stone implements, while debitage scatters contain stone waste flakes, which are a byproduct of tool making. Other cultural sites or resources include (and are not limited to) red and white clay sources, rock shelters, village sites, projectile points, ground stone, and TCPs (e.g., Tosawihi Quarries, Rock Creek). According to the Western Shoshone, cultural sites are associated with the ancestors and considered “physical proof of Shoshone existence” or physical expressions of cultural identity.

The impact analysis of the Proposed Action indicates no adverse impacts to cultural sites (including TCPs and properties of traditional religious and cultural importance) based on compliance with the NHPA, PA, and implementation of mitigating measures involving data recovery (i.e., archaeological excavation), along with collection of all important artifacts with detailed recording of their context. Therefore, under NEPA, no cumulative effects to cultural sites would occur as a result of the Proposed Action. However, if data recovery is necessary to mitigate unavoidable adverse effects to NRHP-eligible sites, the process would recover a substantial amount of data but ultimately the site would be destroyed by the undertaking preventing future opportunities for scientific research, preservation, or public appreciation. Data recovery mitigates the potential damage, but the effects are still adverse. Over time, this represents a cumulative loss.

3.17.3.2 Drawdown Impacts to Springs

The proposed project would result in impacts to springs within the maximum extent of the 10-foot groundwater drawdown contour (Section 3.6.2.1, Proposed Action). These impacts would be in addition to impacts caused by mining development within the Rock Creek Valley and Willow Creek Valley hydrographic areas (Section 3.6.3, Cumulative Impacts). These cumulative impacts would result from ongoing surface disturbance by mining and other land uses, from Carlin Trend mine dewatering and pumping discharges, and from groundwater drawdown. Within the context of Native American traditional values, this represents a cumulative impact to the intrinsic value of water in tribal culture. For an expanded discussion of cumulative impacts to water resources see Section 3.6, Surface Water Resources and Watersheds.

Summary

From a regional perspective, the proposed project would be viewed as adding to the destruction of Western Shoshone aboriginal territory. However, the co-location of proposed utilities with existing roads; the location of most mining facilities within existing or reclaimed mining disturbance; the relatively small amount of proposed ground disturbance; and, the transition from underground exploration and bulk sampling to underground mining operations would reduce the potential for more widespread disruption of minimally altered portions of this territory. In addition, the proposed project's level of disturbance would represent a small amount of change in the regional landscape. For these reasons, cumulative impacts on Native American traditional values from a regional perspective are anticipated to be minor.

3.17.4 Potential Monitoring and Mitigation Measures

The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the tribes. As stated earlier in Section 3.17.2.1, Proposed Action, and the PA, possible mitigation measures may lessen certain impacts. Adverse effects to religious, spiritual, or sacred values cannot be monitored or mitigated.

Unavoidable adverse effects to known historic properties, as well as sites of tribal importance identified within the APE would be mitigated in accordance with the PA and Historic Properties Treatment Plan. Any subsurface archaeological material, including human remains, discovered during construction activities would be treated in accordance with the PA and NAGPRA, if applicable. Per the PA, the BLM, SHPO, and Tribes may monitor proposed disturbance and any historic properties that remain untreated within or adjacent to the APE. Monitoring of historic properties, including sites of tribal importance, around areas of exploration and mining would be effective in ensuring inadvertent damage would not occur to these properties. No additional mitigation is recommended.

3.17.5 Residual Impacts

Historic properties, TCPs, properties of traditional religious and cultural importance, and contributing loci to the Tosawihi Quarries identified within proposed disturbance areas would be mitigated in accordance with the PA. Although adverse effects to these properties/loci would be mitigated through implementation of data recovery or other forms of mitigation, some of the cultural values associated with these properties/loci cannot be fully mitigated; therefore, it is anticipated that residual impacts to these resources would occur.