



Kim Munson 2011

3.17 Native American Traditional Values

3.17.1 Affected Environment

3.17.1.1 Overview

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 views; 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.

To ensure proper coverage of areas of tribal importance that may be affected by the proposed GWD Project, the BLM requested that the analysis area extend beyond the proposed pipeline ROW. The analysis area for Native American traditional values encompasses five hydrologic basins (Spring, Snake, Cave, Dry Lake, and Delamar valleys) and a 10-mile-wide corridor centered on the proposed pipeline routes where the routes extend outside of the hydrologic basins (**Figure 3.17-1**). The cumulative effects study area is the same as the analysis area.

Regulatory Framework

Federal law and agency guidance require the 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. Some of these locations may be considered sacred to particular Native American individuals or tribes.

Quick Reference

AIRFA – American Indian Religious Freedom Act

ARPA – Archaeological Resources Protection Act

BIA – Bureau of Indian Affairs

EO – Executive Order

NAGPRA – Native American Graves Protection and Repatriation Act

NAM – Native American

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NPS – National Park Service

NRHP – National Register of Historic Places

PA – Programmatic Agreement

RFRA – Religious Freedom Restoration Act

RMP/EIS – Resource Management Plan/Environmental Impact Statement

SHPO – State Historic Preservation Office

SHPO – State Historic Preservation Office

TCP – Traditional Cultural Property

Figure 3.17-1 Native American Traditional Values Analysis Area

In 1992, the NHPA was amended to explicitly allow that “properties of traditional religious and cultural importance to an Indian tribe 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. 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. National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties (Parker and King 1998) defines a traditional cultural property as “one that is eligible for inclusion on the NRHP because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community.” To qualify for nomination to the NRHP, a traditional cultural property must be more than 50 years old, must be a place with definable boundaries, must retain integrity, and must meet certain criteria as outlined for cultural resources in National Register Bulletin 15 (NPS 1995).

In addition to NRHP eligibility, some places of cultural and religious importance to the tribes also must be evaluated to determine if they should be considered under other federal laws or EOs. These include, but are not limited to, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, AIRFA, ARPA, EO 13007 (Sacred Sites) of 1996, and Religious Freedom Restoration Act (RFRA) of 1993.

The 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.

The AIRFA established federal policy for 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.

The ARPA made it illegal to excavate or remove from federal or Indian lands any archaeological resources without a permit from the land manager. Permits may be issued only to educational or scientific institutions, and only if the resulting activities will increase knowledge about archaeological resources. Major penalties for violating the law include both fines and imprisonment.

EO 13007 required federal agencies to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions to: 1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners; and 2) avoid adversely affecting the physical integrity of such sacred sites.

The RFRA is a 1993 U.S. federal law aimed at preventing laws that substantially burden a person's free exercise of their religion.

Indian Trust Assets (ITAs) are legal interests in property held in trust by the U.S. for Indian Tribes or Indian 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 also may be found off-reservations. The U.S. has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian Tribes or Indian individuals by treaties, statutes, and EOs. These are sometimes further interpreted through court decisions and regulations. Management of ITAs is based on, but not limited to, the following EOs and memorandums:

EO 13175, Consultation and Coordination with Indian Tribal Governments, 63 F.R. 96 (November 6, 2000). EO 13175 was issued to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications. When implementing such policies, agencies shall consult with tribal officials as to the need for federal standards and any alternatives that limit their scope or otherwise preserve the prerogatives and authority of Indian tribes.

Government-to-Government Relations with Native American Tribal Governments (Memorandum signed by President Clinton; April 29, 1994). Federal Register, Vol. 59, No. 85. The Memorandum directs federal agencies to consult, to

the greatest extent practicable and to the extent permitted by law, with tribal governments prior to taking actions that affect federally recognized tribal governments. Federal agencies must assess the impact of Federal government plans, projects, programs, and activities on tribal trust resources and assure that tribal government rights and concerns are considered during such development.

Secretarial Order No. 3175 – Departmental Responsibilities for Indian Trust Resources. Secretarial Order 3175 requires Interior bureaus and offices to consult with the recognized tribal government with jurisdiction over the trust property that a proposal may affect.

Ethnographic Overview

The tribes known to have inhabited the analysis area were Western Shoshones and Southern Paiutes. It is believed that these Numic-speaking people entered what is now known as Nevada between 1,000 to 5,000 years ago (Madsen and Rhode 1994). It is generally thought by scholars and is related in various Native American oral histories that these people came from the western coastal area. Many of today's Paiute and Shoshone say they have been here since time immemorial.

Western Shoshone

Shoshone people once inhabited an enormous geographical region that included territories in parts of present-day California, Montana, Idaho, Nevada, Utah, and Wyoming. For purposes of academic study, Julian Steward (1938) and other anthropologists divided the Shoshone into three groups based on territorial occupations: Western Shoshone (including the Goshute), Northern Shoshone and Bannock, and Eastern Shoshone. Linguistically, these bands of extended families shared a similar but dialectically diverse language classified by linguists as “Shoshonean,” part of the Central Numic branch of the large Uto-Aztecan language family (Thomas et al. 1986). Western Shoshone call themselves “Newe” or “the People.” The analysis area includes the traditional territories of the Western Shoshone people who now live on reservations or within tribal colonies throughout the Great Basin and California.

Western Shoshone first felt the negative impacts of European settlers when Ute slave traders raided their traditional lands and sold captives to the New Mexico colonial settlers (Defa 2000). Western Shoshone groups came into closer contact with European traders and trappers in the 1820s, but early contact with these men had little effect on Goshute culture (Thomas et al. 1986). The Western Shoshone and Goshute were heavily affected by the encroachment of Mormons into their traditional territory and by the California gold rush traffic during the late 1840s and early 1850s (Thomas et al. 1986).

In August 1855, the first treaty with the Western Shoshone was signed but was never ratified by Congress. As a result, the U.S. Government never recognized it although the Western Shoshone accepted and continued to hold to the treaty. In 1863, another treaty (Treaty of Ruby Valley) was signed with three Bannock bands and one Western Shoshone band and later ratified by the U.S. Government. The Treaty of Ruby Valley anticipated economic development and population changes as a result of White settlement, and stipulated terms of compensation for damages as a result of encroachment by non-Native communities. Additionally, the Treaty mapped out Western Shoshone territory and stipulated the creation of reservations for Western Shoshone Bands.

In 1877, the government set aside lands for a reservation on the state line between Nevada and Idaho near Duck Valley, Idaho, and another at Carlin Farms near the towns of Carlin and Elko, Nevada. Carlin Farms eventually was reclaimed by non-natives, and the Duck Valley Reservation became home for only a quarter of the 4,000 Western Shoshone that were expected to relocate to reservation lands. By 1884, only about 300 Western Shoshone families remained at the Duck Valley Reservation (Crum et al. 1976; Powell and Ingalls 1873, as cited in Woods 2003). Several Western Shoshone reservations were established in the 1900s: Elko Colony, Elko, Nevada (1918 - eventually moved to another location on the north side of Elko); Duckwater Reservation, Duckwater, Nevada (1940 - expanded in 1943 and again in 1951 for a total of 15,000 acres); South Fork Reservation (1941); Ely Colony (1931 - expanded in 1977 from 10 to 100 acres) (Crum et al. 1976, cited in Woods 2003).

In the 1930s, the South Fork, Wells, Elko, and Battle Mountain bands organized as the Te-Moak Bands of Western Shoshone Indians, which was federally recognized in 1938. Colonies eventually were established for each band. The Indian Claims Commission considered the Goshute to be a separate landholding entity in 1962 (Stewart 1980; Thomas

et al. 1986). Today, two reservations have been established for the Goshute; one in Deep Creek Valley and the other in Skull Valley.

Many Western Shoshone continued to live in traditional bands within their ancestral areas, including Diamond and Pine valleys. Some traditional activities, such as bartering pine nuts and selling baskets, generated modest income and reinforced cultural identity. During the early part of the 20th century, fandangos (i.e., multi-day cultural celebrations featuring traditional foods, round dances, songs, and hand games) provided a forum for socializing, political discussion, and elections. In later years, the fandango incorporated rodeo and baseball and became associated with federal holidays such as the Fourth of July and Labor Day.

In his archival research and fieldwork on the Great Basin native people, Julian Steward (1938) identified many Shoshone and Goshute villages consisting of one to six families within the analysis area. Steward believed that village sites were comprised of Shoshone families, and to depict their locations, he hand drew regional maps with their locations. Modern day interpretations of these maps place the villages within parts of southern Spring and Snake valleys.

Habitation Patterns

Due to the highly mobile lifestyle of the Western Shoshone, typical homes were temporary, simple structures made of nearby resources such as sagebrush, tree limbs, and bark. A winter house common to the Western Shoshone was a conical hut (wickiup) that housed as many as six family members. The Goshute also lived in caves, rock shelters, and desert brush structures. Families moved in groups and formed winter villages near food caches (Thomas et al. 1986).

Subsistence

Since the traditional territory of the Western Shoshone and Goshute was so large, families were able to utilize a great variety of plant and animal resources, most of which were tied to specific locations and seasons. This led to a migration system whereby families basically followed the seasonal resources as they became available (Thomas et al. 1986). Small family groups usually returned to favorite gathering areas and hunting areas from spring to fall. During the winter months, families would gather into groups and form villages located in relatively warm areas near food caches (Steward 1938; Thomas et al. 1986).

As hunters and gatherers, Shoshone and Goshute people maintained a diet that was similar to that of other Great Basin groups. Seeds, roots, pine nuts, mesquite beans, cactus meat, and gourds were some of the most utilized plant food sources (Steward 1938). Wild game that were hunted included mountain sheep, antelope, deer, mountain lions, wolves, rabbits, wildcats, rodents, some reptiles and fish, and a variety of birds (Egan 1917; Fremont 1845; Powers 1877; Simpson 1983; Steward 1940, 1941, 1938; Stewart 1980). Antelope and rabbit drives involved the communal efforts of Western Shoshone families, and were highly ritualistic (Egan 1917; Steward 1940, 1941, 1938). The Goshute were called “Digger Indians” because they dug for many of their staple food sources such as roots, tubers, bulbs, and even small animals. Insects, such as grasshoppers, also were consumed. The Goshute were highly adapted to the desert environment and processed over 80 documented species of vegetable foods, including seeds, greens, berries, roots, and pine nuts (Defa 2000).

Typically, women were responsible for seed and nut gathering and processing, food preparation, and making baskets, pottery, and some clothing items (Steward 1938). Men usually hunted large game, making flint points, digging sticks, and rabbit skin blankets. Men also assisted women with hunting rodents, carrying wood and water, transporting seeds, and gathering some materials for making pots, baskets, and metates. Both men and women participated in fishing activities. Children also were expected to help with many of the activities (Steward 1938).

Pine nut gathering was a significant fall event for Shoshone families that used to inhabit most of the geographic basins within the analysis area. Pine nuts were gathered in Cave Valley from the Ely Mountains, around Mount Grafton, and as far south as Willow Creek (Steward 1938). Steward notes that pine nuts were gathered near all village sites within Spring and Snake valleys. Families gathered independently of each other and often stored harvests in private locations.

Religion and Ceremonies

Western Shoshone religion revolved around direct relations with the supernatural, including shamanism and the interpretation of dreams. A formal priesthood is not thought to have existed within the Western Shoshone culture, but

three types of shamans and two types of dream states have been documented (Thomas et al. 1986). Rituals often involved singing and were closely tied to subsistence strategies, such as antelope hunts, rabbit and deer drives, and even grasshopper drives (Thomas et al. 1986; Defa 2000). The Shoshone had few group ceremonial activities such as dances, although the Round Dance was practiced by some Shoshone groups (Thomas et al. 1986). The Round Dance was described by Steward (1941) as a “distinctively Shoshonean dance” that typically was performed during festivals. According to Woods (2003), Goshute religion and spiritual life basically was the same as that of the Western Shoshone, although there were some differences that were attributed to the harsh desert environment of Goshute territory.

Western Shoshone and Goshute burial customs varied. Cremation was widely practiced in Death Valley and locations in Nevada. In other areas, the dead were buried in rock slides and talus slopes (Thomas et al. 1986). The Goshute also cremated the deceased, sometimes in their dwelling, along with possessions (Driver 1937). Goshute burials also have been found in caves or excavated pits (Driver 1937; Nickens 1984).

Oral Traditions

Oral traditions are central to Western Shoshone and Goshute people as they are one way of passing cultural traditions from generation to generation. Like other Numic speakers, the Western Shoshone and Goshute had oral traditions that centered on Wolf and Coyote. In Shoshone myths and legends, Wolf is characterized as being a godly, wise, and paternalistic figure, while Coyote is the trickster and sometimes malevolent figure (Crum et al. 1976). Hero legends have been documented in Goshute folklore that glorify individuals or Goshute families at the expense of their enemies.

Southern Paiute

The traditional territories of the Southern Paiute extended across southern Utah and Nevada, northern Arizona, and down along the western side of the Colorado River to present-day Blythe, California. Kelly and Fowler (1986) listed at least 16 Southern Paiute groups or bands that each had their own territories within these lands. Martineau (1992) recorded the names of 29 bands, many of which no longer exist. The Inter-Tribal Council of Nevada (1976) listed 19 bands. Of these bands, those whose traditional lands are located within or nearest the analysis area are the Moapa, Las Vegas, and Chemehuevi bands.

Although considered to be the territory of the Las Vegas band, the Las Vegas area, “was apparently an area shared by many regional Native Americans on a cooperative basis and not considered the property or territory of any single group” (Haarklau 1999; Inter-Tribal Council of Nevada 1976; Jensen 1926). The area was a stopover and gathering site for many different bands of Southern Paiute. The Inter-Tribal Council of Nevada (1976) states, “Las Vegas always had been used and often occupied by various different Nuwuvi bands.” Southern Paiute call themselves “Nuwuvi” meaning “the people.”

Habitation Patterns

Like other Numic tribes in the past, the Southern Paiute were hunters and gatherers and generally migrated on a seasonal basis within particular band territories. These annual cycles differed among bands based on environmental conditions. Some preferred to spend the winter at high elevations; others wintered at the base of hills or in protected canyons. Some Southern Paiute bands chose to live in caves; others lived in conical brush shelters called wickiups. In the summertime, many Southern Paiute families lived among the trees under shades made of brush (Kelly and Fowler 1986). The favored semi-permanent campsites were at the bases of scarps or lower slopes near water sources and juniper stands (Kelly 1964). During earlier times, Southern Paiute house types consisted of the wickiup, a dome-shaped structure made of posts and covered with grass and bark, a circular enclosure made of brush, and a rectangular shade consisting of a flat roof on posts. They also constructed sweat lodges that were smaller versions of the wickiup (Kelly 1964, 1976).

Subsistence

In the past, plant gathering methods employed by the Southern Paiute primarily were the same as those used by other Numic people. Seeds, mostly from grasses, were gathered using a seed beater, parched using a flat parching tray, and stored in a conical container. Berries, including buffalo berries, choke cherries, currants, elder berries, gooseberries, raspberries, service berries, squaw berries, and strawberries, either were eaten fresh or dried and stored in a buckskin bag. Roots, like the sego root, were collected with a digging stick. Other plants utilized for food by the Southern Paiute include pine nuts, some cacti, yucca fruit, cattail, tule, and mescal (Kelly 1964, 1976; Kelly and Fowler 1986). As

stated previously, the Southern Paiute were hunters and gatherers; however, a few of the bands did practice a small amount of horticulture (Lockwood 1872; Lyle 1872; Steward 1938). The Las Vegas band and Chemehuevi adopted the Mojave practice of floodplain farming, as well as the cultivation of associated crops (Kelly and Fowler 1986). Plants grown by the Southern Paiute included corn, squash, pumpkins, musk melons, watermelons, gourds, beans, sunflower, winter wheat, and devil's claw (Kelly and Fowler 1986).

Around the time of European contact, hunting methods used by the Southern Paiute were similar to those of other Numic people, but were adapted to meet environmental conditions. They held organized drives to capture and kill rabbits and antelope. Antelope drives did not appear to be shamanistic and were not held often (Kelly 1976). Mountain sheep sometimes were hunted by parties who ran the sheep into a cleft in a canyon or onto a promontory. The hunters used fire to drive the sheep. Occasionally they would run the mountain sheep off a bluff. Other animals hunted for food included deer, bears, mountain lions, young coyotes, foxes, wildcats, porcupines, beavers, marmots, badgers, ground hogs, rock squirrels, prairie dogs, squirrels, chipmunks, wood rats, mice, gophers, ducks, flickers, mourning doves, sage hens, wild turkeys, quail, owls, eagles, bird eggs, fish, lizards, snakes, locusts, ant larvae, and caterpillars (Kelly 1976; Kelly and Fowler 1986).

Religion and Ceremonies

The Southern Paiute practiced a form of spirituality known by anthropologists as shamanism. As with other cultures, Southern Paiute shamans received their power through dreams. During these dreams, the prospective shaman was visited by one or more tutelaries, usually in animal form. The tutelaries bestowed the shaman with power and provided instructions and songs (Kelly and Fowler 1986). For the Chemehuevi and Las Vegas band, dreams sometimes could be obtained by spending a night alone in one of several caves (Laird 1976).

The Southern Paiute utilized relatively few ceremonies and dances. These included the Mourning Ceremony or Cry, Ghost Dance of the 1890s, Round Dance, and a dance involving the Deer or Mountain Sheep Song (Kelly and Fowler 1986). Other dances not considered originally Southern Paiute were part of ceremonial life by the early 20th century, including a non-circle dance and a Prophecy song prevalent among the Moapa, Panaca, and Pahranaagat that was adopted from the Western Shoshone (Kelly and Fowler 1986).

Oral Traditions

To the Southern Paiute, in the beginning of the world, it was covered with water. Two men, Coyote and his older brother, Panther, built a house in a dry place in southern Nevada. Coyote was an integral part of Southern Paiute oral history. He was responsible for naming animals at the beginning of time, stealing fire for mankind, starting agriculture, establishing birth customs, and teaching the people how to tie a bowstring and make pottery.

Native American Consultation

In compliance with the NHPA, as amended, the BLM initiated government-to-government consultation for the SNWA GWD Project EIS on February 23, 2007, by sending letters to all federally-recognized Indian tribes either located in or with traditional ties to the analysis area (**Table 3.17-1**). Letters were sent to inform the various groups of the proposed undertaking and to solicit their concerns regarding the possible presence of properties of cultural, religious, and/or traditional importance to the tribes in the analysis area. In addition, the BLM sent letters to the Western Shoshone Defense Project, Inter-Tribal Council of Nevada, and Western Shoshone National Council to inform them of the proposed Project. **Tables F3.17-1 and F3.17-2 in Appendix F** list the contacted Native American groups and summarize the consultation, communication, and coordination efforts, plus concerns expressed by the tribal groups regarding the proposed project. As part of this process, the BLM asked the tribes to identify culturally significant plants and animals. Several tribes provided lists and impacts to these species are analyzed in Sections 3.5, Vegetation Resources, 3.7; Aquatic Biological Resources; and 3.6, Terrestrial Wildlife. **Table 3.5-8** lists specific plant species that several tribes have identified as valuable for food, medicine, and tools (Steele 2010a).

Table 3.17-1 List of Contacted Native American Groups

Chemehuevi Indian Tribe	Paiute Indian Tribe of Utah: Cedar Band of Paiute Indians Indian Peaks Band of Paiute Indians Kanosh Band of Paiute Indians Koosharem Band of Paiute Indians Shivwits Band of Paiute Indians
Colorado River Indian Tribes	
Confederated Tribes of Goshute Reservation	
Duckwater Shoshone Tribe	
Duck Valley Shoshone-Paiute Tribes	
Ely Shoshone Tribe	
Fort Mojave Indian Tribe	Te-Moak Tribes: Battle Mountain Band Elko Band South Fork Band Wells Band
Hualapai Tribal Council	
Kaibab Paiute Tribe	
Las Vegas Paiute Tribe	
Moapa Band of Paiutes	
Pahrump Paiute Tribe	Timbisha Shoshone Tribe
	Yomba Shoshone Tribe

In addition to the concerns identified through the consultation process, the Confederated Tribes of the Goshute Reservation submitted a resolution (Resolution No. 06-G-39) to the BLM dated July 26, 2006 (Steele 2006). The resolution lists the following tribal concerns regarding the proposed Project:

- Irreparable harm to the flow and output of artesian springs and streams;
- Negative impact on wildlife and agriculture;
- Cultural, religious, and environmental implications; and
- Sacredness of the water.

The Confederated Tribes of the Goshute Reservation has expressed opposition to the proposed Project in “order to protect the springs and streams, which have cultural and spiritual significance to Goshute.” According to the Goshute Tribe, “for centuries the land and water on the aboriginal lands of the Goshute have been central to tribal culture and religion, and tribal members have lived in harmony with plants and animals in a delicate natural and spiritual balance. The Goshutes know that the earth is alive and that water is the earth’s lifeblood and life comes from and returns to water. Water is the first living spirit on earth and the lifeline of everybody in the world; without water, life on earth would cease. Water is physically precious and spiritually significant to the native peoples in the Great Basin. Tribal governments have been preserving the quality of their land, air, and water to provide for their people’s welfare and economic health. When the water is gone, the future is gone” (Steele 2006).

In June 2008, the National Congress of American Indians (NCAI) Resolution REN-08-017, “Opposing the Southern Nevada Water Authority Water Pumping Proposal,” was adopted by the NCAI General Assembly (Allen 2008). The NCAI was established in 1944 and is the oldest and largest national organization of American Indian and Alaska Native tribal governments. The resolution states that “SNWA’s pending applications and groundwater development proposal would drain Spring and Snake valleys of all supposedly available groundwater in those valleys,” and that “disrupting the hydrological and ecological system of our aboriginal lands, including Spring and Snake valleys, will cause wide ranging groundwater problems and result in profound harmful and long-lasting environmental, economic, cultural, and spiritual impacts on the people of the Great Basin.” Concluding statements in the resolution make clear that the “NCAI opposes the groundwater application of the Southern Nevada Water Authority in Spring Valley, Snake Valley, other areas within and surrounding the aboriginal lands, and the Great Basin” (Allen 2008).

In April 2010, the Confederated Tribes of the Goshute Reservation submitted another resolution (Resolution No. 10-G-24) to the BLM in which the tribe expresses “continued opposition to the proposed SNWA Groundwater Development Project” (Steele 2010a). The tribe believes that SNWA’s proposed groundwater pumping would:

- Deplete groundwater supplies of the Great Basin Tribes aboriginal lands;
- Alter the quality of groundwater in the entire flow system;
- Alter the flow of groundwater in the entire groundwater flow system;
- Alter the amount and quality of water available to down-gradient users;
- Reduce water output in seeps, springs, wells, streams, and other surface water features linked to groundwater;
- Irreversibly harm the ecosystem and the plants, animals, and people that require those area for persistence;
- Affect the distribution of plants and animals that are of cultural significance to the Great Basin Tribes;
- Degrade and eliminate cultural and spiritual resource sites; and
- Degrade and eliminate water resources that sustain our people and their future economic development opportunities.

The Confederated Tribes of the Goshute Reservation requested the NCAI and other affected Indian Tribes to adopt their resolution and similar resolutions opposing the SNWA Groundwater Development Project.

In general, Native American groups participating in tribal consultation have expressed concern that pumping groundwater from the hydrologic basins may decrease or eliminate flows of springs within and surrounding the basins. According to some tribal members, all natural springs and sources of groundwater are considered to be culturally important to the Native American people and the culture of the Great Basin area. Additional concerns expressed by the tribal groups include evidence of their ancestors' occupation and use of traditional homelands within the analysis area, burials, archaeological sites, and cultural beliefs about natural resources, such as plants, animals, and water.

Opportunities for the identification of locations of possible cultural and religious importance and traditional practices that may be affected by the proposed Project will remain open throughout the consultation process, which currently is ongoing, and would continue through project construction and subsequent NEPA analyses.

3.17.1.2 Ethnographic Assessment

As a result of consultation and communication with the tribes identified in **Table 3.17-1**, the BLM determined that an ethnographic assessment was necessary to identify tribal places of cultural and spiritual importance and traditional practices that may be affected by the proposed Project. The ethnographic assessment involved the identification, documentation, and some evaluation of places of particular importance to Native Americans, including potential traditional cultural properties, which may be eligible for inclusion in the NRHP. This was accomplished through: 1) contacts with tribal governments and individuals to request participation in identifying important cultural, traditional, and religious sites, and to identify individuals knowledgeable of the analysis area; 2) oral history interviews with tribal members who knew of important Native American cultural sites/places within the analysis area to develop an inventory of these sites/places; 3) review of published and unpublished literature relative to Native American occupancy and use of the analysis area; 4) field visits to sites identified as important to Native Americans within the analysis area; and 5) documenting concerns and recommendations regarding potential impacts, and treatment and preservation of the identified sites and places.

Ethnographic Assessment Methodology

Ethnographers Stephen Weidlich and Molly Molenaar conducted the ethnographic assessment and prepared the subsequent report. Mr. Weidlich was assigned to engage directly with those tribes either located in, or with traditional ties to, the southern half of the analysis area (**Table 3.17-2**). These tribal groups included all Southern Paiute, Chemehuevi, and Mojave, including the Colorado River Indian Tribes. Ms. Molenaar was assigned to engage directly with those tribes located in, or with traditional ties to, the northern half of the analysis area (**Table 3.17-2**). These tribal groups included Western Shoshone and Goshute. In June 2008, these tribes were informed about the proposed ethnographic assessment and invited to participate in the study.

Table 3.17-2 Tribes Contacted for the Ethnographic Assessment by Ethnographer

Stephen Weidlich	Molly Molenaar
Chemehuevi Indian Tribe	Confederated Tribes of Goshute Reservation
Colorado River Indian Tribes	Duck Valley Shoshone-Paiute Tribes
Fort Mojave Indian Tribe	Duckwater Shoshone Tribe
Hualapai Tribal Council	Ely Shoshone Tribe
Kaibab Paiute Tribe	Te-Moak Tribes:
Las Vegas Paiute Tribe	Battle Mountain Band
Moapa Band of Paiutes	Elko Band
Pahrump Paiute Tribe	South Fork Band
Paiute Indian Tribe of Utah:	Wells Band
Cedar Band of Paiute Indians	Timbisha Shoshone Tribe
Indian Peaks Band of Paiute Indians	Yomba Shoshone Tribe
Kanosh Band of Paiute Indians	
Koosharem Band of Paiute Indians	
Shivwits Band of Paiute Indians	

To begin the ethnographic assessment, the BLM held informational meetings with interested tribes in Elko on January 23, 2008; in Ely on February 20, 2008; and in Las Vegas on February 26, 2008. Representatives from the Elko Band, South Fork Band, and Wells Band attended the meeting in Elko. Representatives from the Duckwater Shoshone Tribe, Ely Shoshone Tribe, and Confederated Tribes of the Goshute Reservation were in attendance at the Ely meeting. Tribal representatives from the Cedar Band, Chemehuevi Indian Tribe, Colorado River Indian Tribes, Hualapai Tribe, Indian Peaks Band, Kaibab Band of Paiute Indians, Las Vegas Paiute Tribe, Moapa Band of Paiutes, Paiute Indian Tribe of Utah, Shivwits Band of Paiutes, and Timbisha Shoshone Tribe participated in the Las Vegas meeting. At these meetings, SNWA and the BLM introduced various components of the proposed Project, including the ongoing water studies, water rights, and groundwater modeling efforts.

Of the 25 tribes and bands contacted for the ethnographic assessment, 11 tribes and three bands of the Paiute Indian Tribes of Utah requested to participate: Confederated Tribes of the Goshute Reservation, Duckwater Shoshone Tribe, Ely Shoshone Tribe, Timbisha Shoshone Tribe, Colorado River Indian Tribes, Kaibab Paiute Tribe, Las Vegas Paiute Tribe, Moapa Band of Paiutes, Pahrump Paiute Tribe, Chemehuevi Indian Tribe, and the Paiute Tribe of Utah, including the Cedar, Indian Peaks, and Shivwits bands. Of the remaining tribes, the Te-Moak Tribe of Western Shoshone Indians of Nevada and its constituent bands (Battle Mountain, Elko, South Fort, and Wells) declined to participate because they are opposed to the proposed project. The Yomba Shoshone Tribe, Fort Mojave Indian Tribe, and Hualapai Tribe declined participation and most deferred to those tribes with closer ties to the analysis area. The Duck Valley Shoshone-Paiute Tribe and Kanosh Band of Paiutes did not provide a final response to the request for participation in the ethnographic assessment.

Review of archival records and literature sources was conducted by Ms. Molenaar and Mr. Weidlich to obtain background information on previously identified places of tribal importance and to provide a baseline for field investigations. Both general ethnographic literature and previous project reports were included in the review.

The fieldwork component of the ethnographic assessment involved Native American contacts via telephone, email, faxes, and letters; meetings with tribal representatives; interviews; and field visits to the analysis area. Eight field visits were conducted as part of the ethnographic assessment.

- July 8, 2008: representatives of the Ely Shoshone Tribe, Duckwater Shoshone Tribe, and Confederated Tribes of the Goshute Reservation participated in field visits to Snake and Spring valleys.
- July 11, 2008: representatives of the Timbisha Shoshone Tribe, Moapa Band of Paiutes, and Shivwits Band of Paiutes participated in a field visit to the Pahrangat NWR.

- September 4, 2008: representatives of the Ely Shoshone Tribe, Duckwater Shoshone Tribe, and Indian Peaks Band of Paiute Tribe participated in a field visit to Cave Valley.
- October 14, 2008: representatives of the Pahrump Paiute Tribe participated in a field visit to Coyote Spring Valley.
- January 23, 2009: representatives of the Moapa Band of Paiutes, Kaibab Paiute Tribe, and Confederated Tribes of the Goshute Reservation participated in field visits to Coyote Spring, Pahranaagat, and Delamar valleys.
- August 8, 2009: representatives of the Confederated Tribes of the Goshute Reservation and Ely Shoshone Tribe participated in a field visit to North Snake Valley.
- August 25, 2009: a representative of the Las Vegas Paiute Tribe participated in field visits to Coyote Spring, Pahranaagat, and Delamar valleys.
- January 7, 2010: representatives of the Shivwits Band, Chemehuevi Tribe, and Cedar Band participated in a field visit to Dry Lake Valley.

Tribal Comments on the Ethnographic Assessment

In November 2009, the BLM mailed hard copies of the draft ethnographic assessment report to the tribal groups listed on **Table 3.17-2**. Following receipt of the draft report, the tribal groups were invited to two all-day meetings hosted by the BLM. One of the meetings was held in Ely, Nevada, on December 8, 2009, and the other in Las Vegas, Nevada, on December 9, 2009. The purpose of the meetings was to discuss and comment on the draft report. Tribal representatives from the Cedar Band Paiute, Ely Shoshone, Confederated Tribes of the Goshute Reservation, Battle Mountain Band Council, Duckwater Shoshone Tribe, South Fork Band of the Te-Moak Tribe, and Ely Duckwater Tribe participated in the Ely meeting. Representatives from the Shivwits Band of Paiutes, Cedar Band of Paiutes, Southern Nevada Pahrump Paiute Tribe, Las Vegas Paiute Tribe, Kaibab Band of Paiute Indians, Moapa Band of Paiutes, Koosharem Band of the Paiute Indian Tribe of Utah, and Chemehuevi Indian Tribe participated in the Las Vegas meeting.

Tribal comments on the draft ethnographic assessment report documented during the December meetings were summarized in meeting notes and mailed to the tribes and bands. At the meetings, the tribes requested additional time to comment on the draft report. Subsequent to the meetings, the BLM received numerous additional comments and has addressed the comments through revisions to the draft report and through the ongoing government-to-government consultation efforts. Many of the tribes felt the assessment was inadequate and limited in scope. Some tribes questioned the methodology used to collect the information on sites of importance to the tribes. Others felt that the ethnographic assessment analysis area did not cover a large enough area.

On January 21, 2010, the BLM received a resolution (Resolution No. 10-G-05) from the Confederated Tribes of the Goshute Reservation regarding the draft ethnographic assessment report. The Confederated Tribes of the Goshute Reservation support the information in the draft report pertaining to sites and places identified through the literature search and field work conducted for the assessment. However, the proposed project will “have an adverse effect and violate laws if the GWD Project alters any characteristics of properties that qualify for listing on the National Register.” Furthermore, the Goshute Tribe states “it is in the best interest of the Goshute Tribe and Native American Indian Tribes to call for the BLM to preserve the village sites” (identified in the draft ethnographic assessment), and for the “BLM to take immediate action to preserve and protect these sites in perpetuity” (Steele 2010b).

On February 8, 2010, the Duckwater Shoshone Tribe sent a resolution (Resolution 2010-D-6) regarding the draft ethnographic assessment report to the BLM. The Duckwater Shoshone Tribe “does not support or accept the ethnographic text in its entirety;” however, the tribe supports the information on sites identified in the draft report that were “historically used by our ancestors for holding ceremonies and have significant cultural and spiritual connections to the sacred areas.” The Tribe “rejects the draft ethnographic assessment” and requests the BLM to “amend the draft ethnographic assessment with Duckwater Shoshone Tribe’s approval” and incorporate the approved ethnographic assessment into the SNWA GWD Project EIS (Sanchez 2010).

In January 2011, the BLM sent the final ethnographic assessment, in which tribal comments had been addressed, to the tribes listed in **Table 3.17-2**. Due to the sensitive and confidential nature of the information included in the ethnographic assessment, the document will not be available to the public and will not be included in this EIS.

On March 24, 2011, the Duckwater Shoshone Tribe sent another resolution (Resolution 2011-D-11) regarding the final ethnographic assessment report to the BLM. The Duckwater Shoshone Tribe “rejects” the final ethnographic assessment on the “basis that it does not reflect the tribal concerns of the Duckwater Shoshone Tribe” (Sanchez 2011). Additionally, the Tribe “disagrees with the methodology and lack of formal and private interviews,” and requests an ethnographic assessment be conducted correctly with a “professional ethnographic team.” The Tribe would be willing to participate in choosing the study team.

Assessment of Places of Tribal Importance

As a result of literature searches, tribal interviews, meetings, consultation, and field trips, a total of 76 locations were identified as possible places of cultural and religious importance to Native Americans. Information on 54 of the sites can be found in existing records and literature. A total of 48 are known to be located within the analysis area. Based on the information obtained through ethnographic sources, tribal interviews, consultation, and field trips, the ethnographers recommended eight of the sites as eligible for the NRHP as TCPs. However, two of the tribal groups contacted as part of the ethnographic assessment requested that all 76 locations identified in the assessment be investigated as possible TCPs. The potential TCPs include one or more of the following site types: villages or settlements, naturally-occurring water, plants important to Native Americans, locations of massacres or violence, graves, spiritual and/or ceremonial areas, rock art, trails, and locations of important events.

Evaluation of each site as a TCP will be conducted by the BLM in consultation with those tribal groups that attach cultural and religious significance to the site. The first step in the evaluation process requires defining the TCP’s geographic boundary, which will be established by the BLM and tribal groups. Following delineation of the geographic boundary, the proposed TCP will be fully documented. Documentation will include the history and archaeology of the site, as well as a written statement as to the cultural significance to the tribal groups. The statement will be written by the BLM and SNWA’s cultural contractor with tribal input and review.

The proposed TCP will then be analyzed for eligibility for the NRHP based on the information gathered through tribal interviews, literature searches, consultation, and field visits. To qualify for nomination to the NRHP, a TCP must be more than 50 years old, be a place with definable boundaries, retain integrity (i.e., integrity of location, design, setting, materials, workmanship, feeling, and association), and meet certain eligibility criteria as outlined in the National Register Bulletin entitled *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. Per those guidelines, there must be demonstration of an “...association of cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community” (Parker and King 1998). Concurrence on those TCPs determined eligible by the BLM will be requested from the Nevada SHPO. When the BLM Ely and Las Vegas RMPs are revised, which occurs approximately every 10 years, the BLM will amend them to reflect the existence of the TCPs. At that time, the BLM will review any ACECs that contain, or are a part of, an eligible TCP.

The BLM will consult with tribal groups regarding any proposed TCPs in which the BLM is unable to determine as eligible for the NRHP. The BLM and tribal groups will decide between two possible courses of action for these properties: 1) the file on the proposed TCP is kept open in the event more information is obtained in the future; or 2) the proposed TCP is dropped from consideration of future management.

3.17.2 Environmental Consequences

3.17.2.1 Rights-of-way

Issues

- Potential impacts to sites of cultural, traditional, or religious importance to the tribes.
- Potential impacts to buried sites, in particular, human remains.

Assumptions

- Native American consultation currently is underway and would continue up to and including project construction.
- Protection of any traditional cultural properties, sacred sites, and properties of cultural and religious importance identified by the tribes would be in accordance with the GWD Project PA, in which the tribes have been invited to participate as concurring parties, as well as with federal regulations.

Methodology for Analysis

Surface disturbance impacts were evaluated for each alternative using the following methods:

- The project-specific issues for the effects analysis were identified based on the information provided by the tribes during Native American consultation, communication, and coordination, and during preparation of the ethnographic assessment (BLM 2010).
- The analysis of potential impacts to Native American traditional values was prepared in accordance with NEPA. For purposes of this analysis, the effects of federal undertakings on properties of cultural and religious 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 Indian tribes into the Section 106 compliance process, and also strives to make the NHPA and NEPA procedurally compatible. Furthermore, under NAGPRA, culturally-affiliated Indian tribes and the BLM jointly may develop procedures to be taken when Native American human remains are discovered on federal lands.

3.17.2.2 Proposed Action, Alternatives A through C

Construction and Facility Maintenance

All Right-of-way Construction and Facility Maintenance Impact Issues

Of greatest concern to tribal members were potential impacts to burials, ancestral places associated with religious or spiritual beliefs, and archaeological sites (related to their heritage) as a result of constructing the proposed pipeline and transmission lines. Some tribal members stated that archaeological sites (including human remains) would be “irrevocably destroyed by project construction,” and “large sites located along the proposed Project alignment may have associated human remains.” The types of impacts that could occur to these sites, including human remains are discussed in Section 3.16, Cultural Resources, and will not be repeated here.

A total of 76 locations were identified as possible places of cultural and religious importance to Native Americans through tribal interviews, meetings, consultation, and field trips; 48 of the 76 locations are known to be located within the analysis area. The ethnographers involved in the ethnographic assessment recommended eight of the sites as eligible for the NRHP as possible TCPs. Two of the tribal groups involved in the consultation efforts requested the BLM investigate all 76 locations as possible TCPs. Maps of the 48 known locations show that one known location would be crossed by the proposed pipeline ROW and two known locations could be visually affected by the proposed transmission lines. The remaining known locations are outside of proposed disturbance areas or not within view of the proposed transmission lines. However, Class III cultural resources inventories of proposed disturbance areas have not been conducted as of this date but would be completed prior to construction in accordance with the PA. Additional places of cultural and religious importance to Native Americans may be identified during the inventories. The cultural resources files search conducted for the proposed Project identified a number of previously recorded prehistoric sites within the proposed pipeline/transmission line ROWs. The sites primarily consist of lithic scatters, artifact scatters, and rock shelters.

Resolution of Right-of-way Construction and Facility Maintenance Impacts

A PA among the BLM Ely and Southern Nevada district offices, Nevada SHPO, ACHP, USACE, and SNWA currently is being developed for an area that encompasses the proposed Project (see **Appendix F3-16** for a copy of the draft PA). The draft 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 eliminate adverse effects; and 5) address inadvertent discoveries. NRHP-eligible resources to be considered under the PA also include properties of cultural and religious importance to Indian tribes. In developing the draft PA, the BLM has consulted with all federally recognized Indian tribes with traditional ties to the analysis area, and because of those ties, may attach religious and cultural significance to historic properties that may be affected by the proposed Project. The reader is referred to the draft PA in **Appendix F3-16** for the list of consulted tribes. Those same tribes were provided a copy of the draft PA and invited to comment on and suggest changes to any part of the agreement. Additionally, the BLM invited each of the tribes to be a concurring party to the PA. Finalization of the draft PA is pending additional input from interested Indian tribes, consulting parties, and the public.

In consultation with the Nevada SHPO, ACHP, and interested Indian tribes, the BLM would determine whether construction and facility maintenance of the proposed Project would have an adverse effect on any properties of cultural and religious importance, including TCPs. If the BLM determines that a property would be adversely affected, measures to avoid, minimize, or mitigate such effects would be proposed in accordance with the PA. Measures to avoid, minimize, or mitigate effects may include, but would not be limited to, one or more of the following: 1) avoidance through changes in the construction or operational design; 2) data recovery, which might include the systematic professional excavation of a property; 3) the use of landscaping or other techniques that would minimize or eliminate visual effects on a site's setting; 4) a safety buffer or protective fencing between project disturbance and sites; 5) monitoring; or 6) other mitigation determined by the BLM through consultation with the SHPO, ACHP, interested Indian tribes, and other interested parties. Mitigation measures would be based on the types of impacts relevant to the site type.

Any discovered human remains, funerary objects, or items of cultural patrimony would be handled in accordance with the NHPA, NAGPRA, and PA. Specifically, 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 cease within 325 feet of the discovery, and the BLM would be notified of the find. Any discovered Native American human remains, funerary objects, or items of cultural patrimony found on federal land would be handled in accordance with the NAGPRA and procedures detailed in the PA. Non-Native American human remains on federal land would be handled in accordance with Nevada law. Construction would not resume in the area of the discovery until the BLM has issued a notice to proceed.

If human remains and associated funerary objects are discovered on private land during construction activities, construction would cease within 325 feet of the discovery and the county coroner or sheriff would be notified of the find. Treatment of any discovered Native American human remains and associated funerary objects found on private land would be handled in accordance with the provisions of NRS 383; non-Native American human remains would be handled in accordance with Nevada state law.

Conclusion: Approximately 12,300 acres would be disturbed as a result of construction activities. Direct impacts to properties of cultural and religious importance, including TCPs, would be proportional to the amount of ground disturbance associated with project construction. A total of 48 locations of tribal importance are known to be located in the analysis area. Of these, one would be crossed by the proposed pipeline ROW and two could be visually affected by the proposed transmission lines. Class III inventories of proposed disturbance areas may identify additional places of tribal importance. Consultation between the BLM and interested tribes would continue in an effort to identify sites of tribal importance, as well as address concerns the tribes may have regarding these resources. No surface disturbance would occur within or immediately adjacent to the boundary of a property of cultural and religious importance prior to completion of all consultation required by law, and, as appropriate, implementation of at least the field phase of any data recovery or mitigation plan to address impacts to that resource. Any data recovery or mitigation plan would be reviewed and approved by the BLM and Nevada SHPO prior to implementation. Interested tribes would be invited to participate as a concurring party in the development of any data recovery or mitigation plan in accordance with federal mandates and the PA.

Proposed mitigation measures:

During the ethnographic assessment, several tribal representatives requested that tribal individuals monitor project construction, in particular near sites in which the tribes attach cultural and religious significance. To reduce potential direct impacts to these types of sites, Mitigation Measure ROW-NAM-1 would provide for the use of qualified tribal monitors in the area of a site in which an Indian tribe attaches religious and cultural significance during project construction. The BLM, in consultation with interested Indian tribes, would identify sites of tribal importance requiring tribal monitors prior to initiation of project construction. Additionally, the BLM would establish the standards required for monitoring.

ROW-NAM-1: Tribal Monitors. Qualified tribal monitors would monitor pipeline construction in the area of a site in which an Indian tribe attaches religious and cultural significance. The BLM would identify these sites in consultation with interested Indian tribes. Effectiveness: This measure would be effective by enabling Native Americans to monitor sites that have cultural and religious significance to them. In addition, this measure would provide an opportunity for tribal involvement in project implementation and direct “on the ground” participation in the management of cultural resources. Effects on other resources: None.

Residual impacts include:

- How many properties of cultural and religious importance, including TCPs, would be adversely affected by the proposed Project is currently unknown. If properties of cultural and religious importance, including TCPs, are identified within proposed disturbance areas or within view of proposed aboveground facilities, impacts would be avoided. If avoidance is not feasible, measures to avoid, minimize, or mitigate effects to these properties would be proposed in compliance with the PA and in consultation with interested Indian tribes. Since some of the cultural, religious, and traditional values associated with these properties cannot be fully mitigated, residual impacts to these properties most likely would occur.

3.17.2.3 Alternative D

The same ROW construction and facility maintenance issues discussed for the Proposed Action and Alternatives A through C would apply to Alternative D, which would involve 225 miles of pipeline and 208 miles of power lines in Clark and Lincoln counties only.

Conclusion. Approximately 8,800 acres would be disturbed as a result of construction activities. Direct impacts to properties of cultural and religious importance, including TCPs, would be proportional to the amount of ground disturbance associated with project construction. Under this alternative, one of the 48 known locations of tribal importance would be crossed by the proposed pipeline ROW and one could be visually affected by the proposed transmission lines. Class III inventories may identify additional properties of cultural and religious importance, including potential TCPs. Native American consultation to identify properties of tribal importance and potential impacts currently is ongoing between the BLM and tribal representatives. No surface disturbance would occur within or immediately adjacent to the boundary of a property of tribal importance prior to completion of all consultation required by law. Measures to avoid, minimize, or mitigate potential impacts to properties of tribal importance would be proposed in accordance with the PA and in consultation with interested Indian tribes.

Proposed mitigation measures:

ROW-NAM-1 (Tribal Monitors) described for the Proposed Action and Alternatives A through C, also would be applied to Alternative D.

Residual impacts would be the same as the Proposed Action and Alternatives A through C.

3.17.2.4 Alternative E

The same ROW construction and operation issues for the Proposed Action and Alternatives A through C would apply to Alternative E, which would involve 263 miles of pipeline and 280 miles of power lines within Spring, Delamar, Dry Lake, and Cave valleys.

Conclusion. Approximately 10,700 acres would be disturbed as a result of construction activities. Direct impacts to properties of cultural and religious importance, including TCPs, would be proportional to the amount of ground disturbance associated with project construction. Under this alternative, one of the 48 known locations of tribal importance would be crossed by the proposed pipeline ROW and one could be visually affected by the proposed transmission lines. Class III inventories may identify additional properties of cultural and religious importance, including potential TCPs. Native American consultation to identify properties of tribal importance and potential impacts currently is ongoing between the BLM and tribal representatives. No surface disturbance would occur within or immediately adjacent to the boundary of a property of tribal importance prior to completion of all consultation required by law. Measures to avoid, minimize, or mitigate potential impacts to properties of tribal importance would be proposed in accordance with the PA and in consultation with interested Indian tribes.

Proposed mitigation measures:

ROW-NAM-1 (Tribal Monitors) described for the Proposed Action and Alternatives A through C, also would be applied to Alternative E.

Residual impacts would be the same as the Proposed Action and Alternatives A through C.

3.17.2.5 Alignment Options 1 through 4

Impacts for the alignment options (1 through 4) are identified in relation to the relevant segment of the Proposed Action (Table 3.17-3).

Table 3.17-3 Native American Traditional Values Impact Summary for Alignment Options 1 through 4

Alternative	Analysis
<p>Alignment Option 1 (Humboldt-Toiyabe Power Line Alignment) Option Description: Change the locations of a portion of the 230-kV power line from Gonder Substation near Ely to Spring Valley. Applicable To: Proposed Action and Alternatives A through C and E.</p>	<ul style="list-style-type: none"> Impacts (direct and visual) associated with Alignment Option 1 would be less than the comparable Proposed Action segment because there would be fewer acres of disturbance and the alignment would be shorter in length. None of the 48 known locations of tribal importance are located along Alignment Option 1; none are located within view of the alignment.
<p>Alignment Option 2 (North Lake Valley Pipeline Alignment) Option Description: Change the locations of portions of the mainline pipeline and electrical transmission line in North Lake Valley. Applicable To: Proposed Action and Alternatives A through C and E.</p>	<ul style="list-style-type: none"> Direct impacts associated with Alignment Option 2 would be greater than the comparable Proposed Action segment because there would be more acres of disturbance; visual impacts would be less than the comparable Proposed Action segment because portions of Alignment Option 2 would parallel an existing visual intrusion (Highway 93). None of the 48 known locations of tribal importance are located along Alignment Option 2; none are located within view of the alignment.
<p>Alignment Option 3 (Muleshoe Substation and Power Line Alignment) Option Description: Eliminate the Gonder to Spring Valley transmission line, and construct a substation with an interconnection with an interstate, high voltage power line in Muleshoe Valley. Applicable To: Proposed Action and Alternatives A through C and E.</p>	<ul style="list-style-type: none"> Impacts (direct and visual) associated with Alignment Option 3 would be less than the comparable Proposed Action segment because there would be fewer acres of disturbance and the 230kV transmission line from Gonder to Spring Valley would be eliminated. None of the 48 known locations of tribal importance are located along Alignment Option 3; none are located within view of the alignment.
<p>Alignment Option 4 (North Delamar Valley Pipeline and Power Line Alignment) Option Description: Change the location of a short section of mainline pipeline in Delamar Valley to follow an existing transmission line. Applicable To: All alternatives.</p>	<ul style="list-style-type: none"> Impacts (direct and visual) associated with Alignment Option 4 would be less than the comparable Proposed Action segment because there would be fewer acres of disturbance and Alignment Option 4 would parallel an existing transmission line. None of the 48 known locations of tribal importance are located along Alignment Option 4; one is located within view of the alignment.

3.17.2.6 No Action

Under the No Action Alternative, the proposed Project would not be constructed. No project-related surface disturbance would occur. As a result, none of the potential impacts to Native American traditional values, including potential burials, as identified for the Proposed Action and Alternatives A through C would occur. Places of tribal importance would continue to be affected by natural events (e.g., fire, erosion) and land use factors (e.g., recreation, energy development). Management direction on public lands will be directed by the Ely and Las Vegas RMPs which include objectives and measures to protect properties of traditional, religious, and cultural importance to Indian tribes.

Additionally, no construction or operational impacts to water resources, which were identified by tribal representatives as a resource of concern, would occur. Surface and groundwater resources would continue to be used and developed in the region in accordance with existing water rights and permitted uses.

3.17.2.7 Comparison of Alternatives

Since location information for Native American Traditional Values is not available for the ROW areas, specific differences between alternatives cannot be identified for this resource.

3.17.2.8 Groundwater Development and Groundwater Pumping

Issues

Groundwater Development Construction and Facility Maintenance

- The same Native American traditional values issues discussed for ROW construction and facility maintenance would apply to groundwater development areas.

Groundwater Pumping

- Water drawdown associated with pumping could affect the streams, springs, and other water sources that are considered sacred by Native American groups.

Assumptions

Groundwater Development Construction and Facility Maintenance

- Native American consultation currently is underway and would continue through project construction and subsequent NEPA.
- Protection of any traditional cultural properties, sacred sites, and properties of cultural religious importance identified by the tribes would be in accordance with the PA (**Appendix F3-16**) and federal regulations.

Groundwater Pumping

- The impact analysis of Native American traditional values for groundwater pumping is based on the same assumptions listed above for groundwater development.

Methodology for Analysis

Groundwater Development Construction and Facility Maintenance

- The analysis of potential impacts to Native American traditional values is based on the same methods described for ROW construction and operation.

Groundwater Pumping

- The analysis of groundwater pumping effects is based on information provided by the tribes during Native American consultation, communication, and coordination, and during the preparation of the ethnographic assessment.

3.17.2.9 Proposed Action

Groundwater Development Area

Full development of the GWD Project would require groundwater production wells, collector pipelines, and associated facilities. Ground-disturbance associated with construction of the wells, pipelines, and ancillary facilities could directly affect properties of cultural and religious importance, including TCPs. Indirect effects, such as illegal collecting of artifacts, vandalism, and inadvertent damage could occur due to increased public access. Proposed aboveground facilities located within the viewshed of any sites of tribal concern could affect the integrity of the site's setting. Subsurface cultural material, including human remains, may be unearthed during construction activities and result in displacement or loss of the material. The actual locations of specific facilities within the groundwater development areas have not been identified at this stage of the project and will be subject to future site-specific NEPA analysis.

Conclusion. Under the Proposed Action, as much as 5,537 acres of permanent ROW and as much as 2,875 acres of temporary ROW would be required within groundwater development areas. Direct impacts to properties of cultural and religious importance, including TCPs, would be proportional to the amount of ground disturbance associated with permanent and temporary ROWs (i.e., wells, pipelines, ancillary facilities). At this time, the number of properties of tribal importance that could be affected by groundwater development is unknown. Consultation between the BLM and interested tribes would be conducted in an effort to identify sites of tribal importance that may be located in areas of proposed ground disturbance or within the viewshed of a proposed aboveground facility. If a site of tribal importance

would be affected by groundwater development, measures to avoid, reduce, or mitigate the effects would be proposed in accordance with the PA, and in consultation with interested Indian tribes.

Additional mitigation measures:

Additional mitigation measures would be developed based on tribal consultation established in the PA. Any additional mitigation measures developed through the consultation efforts would be included in a treatment plan.

Groundwater Pumping

The groundwater pumping scenario for the Proposed Action assumes pumping at the full quantities (i.e., approximately 177,000 afy) listed on the pending water rights application for the five proposed project pumping basins (Spring, Snake, DDC valleys). Of greatest concern among tribal representatives is the potential for groundwater development to affect the springs and streams in and adjacent to the five hydrologic basins in which pumping would occur. According to tribal representatives, “all living things depend on water, and without it, life would cease. Therefore, drying up the springs or reduction of flow, due to groundwater pumping, is of great concern to Native Americans who view water sources as being sacred.” Tribal representatives felt that negatively affecting the springs would jeopardize the health of the plants and animals that rely on the springs for nourishment (see Sections 3.5, Vegetation Resources; 3.6, Terrestrial Wildlife; and 3.7, Aquatic Biological Resources; for a discussion of impacts to plants and animals. Affecting these resources in turn affects the traditional practices of the Great Basin tribes, and would affect the use of these resources by future generations of Native Americans. Concerns were expressed that if the viability of the springs is threatened by the proposed Project, then the project would effectively threaten the viability of everything that relies on them. If this were to happen, then the entire basis for the Native American culture in the Great Basin would be affected.

A total of 76 sites of tribal importance were identified through tribal interviews, tribal meetings, and literature review. Many of these sites were chosen by tribal representatives for field visits. The representatives expressed concerns with groundwater pumping effects to five visited sites because of associated springs. These sites included Turnley Spring, Warm Springs, Maynard Lake, Swamp Cedars, and Spring Creek Spring. Of the five sites, three would be affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars at full build out, full build out plus 75 years, and full build out plus 200 years; Turnley Spring and Spring Creek Spring full build out plus 75 years and full build out plus 200 years.

Conclusion. Although tribal representatives expressed concerns about pumping effects to selected sites, they are equally concerned about groundwater pumping effects to all water sources in and adjacent to the analysis area. If impacts to water resources were to occur as a result of groundwater development, impacts to Native American traditional values also would be expected to occur. Implementation of ACMs including the Adaptive Management Plan and Measures would likely minimize adverse effects to water resources at selected locations. The success of mitigation would depend on site-specific conditions and details of the mitigation plan. However, given the regional scale of the predicted drawdown, and the number of identified water sources that could be affected, it may not be feasible to effectively mitigate impacts to all of the potentially affected water sources. For an expanded discussion of impacts to water resources and proposed mitigation the reader is referred to Section 3.3, Water Resources.

Additional mitigation measures:

None.

3.17.2.10 Alternative A

Groundwater Development Area

Under Alternative A, the types of impacts that could occur as a result of groundwater development would be the same as described for the Proposed Action. Subsequent NEPA analyses would be required to identify potential impacts of groundwater development facilities.

Conclusion. Under this alternative, as much as 3,171 acres of permanent ROW and as much as 1,643 acres of temporary ROW would be required within groundwater development areas. Fewer impacts to properties of cultural and religious importance, including TCPs, are anticipated due to the decrease in surface disturbance compared to the

Proposed Action. Consultation efforts and mitigation of potential impacts would be the same as described for the Proposed Action.

Additional mitigation measures:

Additional mitigation measures would be developed based on tribal consultation established in the PA. Any additional mitigation measures developed through the consultation efforts would be included in a treatment plan.

Groundwater Pumping

The groundwater pumping scenario for Alternative A assumes pumping at reduced quantities (approximately 115,000 afy) from those listed on the pending water rights application for the five proposed project pumping basins (Spring, Snake, and DDC valleys). Under this alternative, three sites with associated springs that were visited by tribal representatives would be affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars and Spring Creek Spring at full build out plus 75 years and full build out plus 200 years; Turnley Spring full build out plus 200 years.

Conclusion. Tribal concerns regarding groundwater pumping effects to water resources within and adjacent to the analysis area are the same as described for the Proposed Action. Implementation of ACMs including the Adaptive Management Plan and Measures would likely minimize adverse effects to water resources at selected locations; however, the success of mitigation would depend on site-specific conditions and details of the mitigation plan. For a comprehensive discussion of impacts to water resources and proposed mitigation the reader is referred to Section 3.3, Water Resources.

Additional mitigation measures:

None.

3.17.2.11 Alternative B

Groundwater Development Area

Under Alternative B, the types of impacts that could occur as a result of groundwater development would be the same as described for the Proposed Action. Subsequent NEPA analyses would be required to identify potential impacts of groundwater development facilities.

Conclusion. Under this alternative, as much as 3,077 acres of permanent ROW and as much as 1,587 acres of temporary ROW would be required in groundwater development areas. Fewer impacts to properties of cultural and religious importance, including TCPs, are anticipated due to the decrease in surface disturbance compared to the Proposed Action. Consultation efforts and mitigation of potential impacts would be the same as described for the Proposed Action.

Additional mitigation measures:

Additional mitigation measures would be developed based on tribal consultation established in the PA. Any additional mitigation measures developed through the consultation efforts would be included in a treatment plan.

Groundwater Pumping

The groundwater pumping scenario for Alternative B assumes pumping at the full diversion rates (i.e., approximately 177,000 afy) listed on the pending water rights application for the five proposed project pumping basins (Spring, Snake, and DDC valleys). Under this alternative, three sites with associated springs that were visited by tribal representatives would be affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars at full build out, full build out plus 75 years, and full build out plus 200 years; Turnley Spring and Spring Creek Spring at full build out plus 75 years and full build out plus 200 years.

Conclusion. Tribal concerns regarding groundwater pumping effects to water resources within and adjacent to the analysis area are the same as described for the Proposed Action. Implementation of ACMs including the Adaptive

Management Plan and Measures would likely minimize adverse effects to water resources at selected locations; however, the success of mitigation would depend on site-specific conditions and details of the mitigation plan. For a comprehensive discussion of impacts to water resources and proposed mitigation the reader is referred to Section 3.3, Water Resources.

Additional mitigation measures:

None.

3.17.2.12 Alternative C

Groundwater Development Area

Under Alternative C, the types of impacts that could occur as a result of groundwater development would be the same as described for the Proposed Action. Subsequent NEPA analyses would be required to identify potential impacts of groundwater development facilities.

Conclusion. Under this alternative, as much as 3,171 acres of permanent ROW and as much as 1,643 acres of temporary ROW would be required in groundwater development areas. Fewer impacts to properties of cultural and religious importance, including TCPs, are anticipated due to the decrease in surface disturbance compared to the Proposed Action. Consultation efforts and mitigation of potential impacts would be the same as described for the Proposed Action.

Additional mitigation measures:

Additional mitigation measures would be developed based on tribal consultation established in the PA. Any additional mitigation measures developed through the consultation efforts would be included in a treatment plan.

Groundwater Pumping

Under Alternative C, the maximum pumping rate would be the same as Alternative A (approximately 115,000 afy). Under this alternative, two sites with associated springs that were visited by tribal representatives would be affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars at full build out plus 75 years and full build out plus 200 years; Spring Creek Spring at full build out plus 200 years.

Conclusion. Tribal concerns regarding groundwater pumping effects to water resources within and adjacent to the analysis area are the same as described for the Proposed Action. Implementation of ACMs including the Adaptive Management Plan and Measures would likely minimize adverse effects to water resources at selected locations; however, the success of mitigation would depend on site-specific conditions and details of the mitigation plan. For a comprehensive discussion of impacts to water resources and proposed mitigation the reader is referred to Section 3.3, Water Resources.

Additional mitigation measures:

None.

3.17.2.13 Alternative D

Groundwater Development Area

Under Alternative D, the types of impacts that could occur as a result of groundwater development would be the same as described for the Proposed Action. Subsequent NEPA analyses would be required to identify potential impacts of groundwater development facilities.

Conclusion. Under this alternative, as much as 2,635 acres of permanent ROW and as much as 1,370 acres of temporary ROW would be required in groundwater development areas. Fewer impacts to properties of cultural and religious importance, including TCPs, are anticipated due to a decrease in surface disturbance compared to the Proposed Action. Consultation efforts and mitigation of potential impacts would be the same as described for the Proposed Action.

Additional mitigation measures:

Additional mitigation measures would be developed based on tribal consultation established in the PA. Any additional mitigation measures developed through the consultation efforts would be included in a treatment plan.

Groundwater Pumping

The groundwater pumping scenario for Alternative D assumes that no pumping would occur in Snake Valley, and pumping in Spring Valley would be restricted to the southern portion of the valley within Lincoln County. The maximum groundwater production rate under this scenario is approximately 79,000 afy for the four pumping basins (Spring and DDC valleys) is the same as the maximum pumping rate assumed for these basins under Alternative A, C, and E. Under this alternative, one site with an associated spring that was visited by tribal representatives would be affected by groundwater pumping based on a 10-foot drawdown: Spring Creek Spring full build out plus 200 years.

Conclusion. Tribal concerns regarding groundwater pumping effects to water resources within and adjacent to the analysis area are the same as described for the Proposed Action. Implementation of ACMs including the Adaptive Management Plan and Measures would likely minimize adverse effects to water resources at selected locations; however, the success of mitigation would depend on site-specific conditions and details of the mitigation plan. For a comprehensive discussion of impacts to water resources and proposed mitigation the reader is referred to Section 3.3, Water Resources.

Additional mitigation measures:

None.

3.17.2.14 Alternative E

Groundwater Development Area

Under Alternative E, the types of impacts that could occur as a result of groundwater development would be the same as described for the Proposed Action. Subsequent NEPA analyses would be required to identify potential impacts of groundwater development facilities.

Conclusion. Under this alternative, as much as 2,683 acres of permanent ROW and as much as 1,396 acres of temporary ROW would be required in groundwater development areas. Fewer impacts to properties of cultural and religious importance, including TCPs, are anticipated due to a decrease in surface disturbance compared to the Proposed Action. Consultation efforts and mitigation of potential impacts would be the same as described for the Proposed Action.

Additional mitigation measures:

Additional mitigation measures would be developed based on tribal consultation established in the PA. Any additional mitigation measures developed through the consultation efforts would be included in a treatment plan.

Groundwater Pumping

The groundwater pumping scenario for Alternative E assumes that no pumping would occur in Snake Valley. The maximum groundwater production rate under this scenario is approximately 79,000 afy for the four pumping basins (Spring, Snake, DDC valleys) is the same as the maximum pumping rate assumed for these same basins under Alternative A, C, and D. Under this alternative, two sites with associated springs that were visited by tribal representatives would be affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars at full build out plus 75 years and full build out plus 200 years; Turnley Spring full build out plus 200 years.

Conclusion. Tribal concerns regarding groundwater pumping effects to water resources within and adjacent to the analysis area are the same as described for the Proposed Action. Implementation of ACMs including the Adaptive Management Plan and Measures would likely minimize adverse effects to water resources at selected locations; however, the success of mitigation would depend on site-specific conditions and details of the mitigation plan. For a

comprehensive discussion of impacts to water resources and proposed mitigation the reader is referred to Section 3.3, Water Resources.

Additional mitigation measures:

None.

3.17.2.15 No Action

Groundwater Development Area

Under the No Action Alternative, the proposed pipelines, powerlines, ancillary facilities, and well fields would not be developed. No project-related surface disturbance would occur. As a result, none of the potential impacts to Native American traditional values, including potential burials, as identified for groundwater development would occur.

Groundwater Pumping

The No Action would be a continuation of historical and permitted water uses, including the continued development of Lincoln and White Pine counties agricultural water rights. Additionally, the No Action includes pumping SNWA's existing water rights associated with their ranch properties in Spring Valley. Water resources important to Great Basin indigenous people would continue to be affected by continued water usage, but to a lesser degree than would be expected as a result of groundwater pumping.

3.17.2.16 Alternative Comparison

Since location information for Native American Traditional values is not available for the groundwater development or the affected pumping areas, specific differences between alternatives can not be identified for this resource.

3.17.3 Cumulative Impacts

3.17.3.1 Issues

Rights-of-way and Groundwater Development Area Construction and Maintenance

- Potential impacts to sites of cultural, traditional, or religious importance to the tribes may have already occurred from past and present actions.
- The proposed ROW and groundwater development construction may result in incremental loss of sites of cultural, traditional, and religious importance to the tribes.
- RFFAs have the potential to cause damage to or loss of sites of tribal importance.
- Potential impacts to buried sites, in particular, human remains.

Groundwater Pumping

- Water drawdown associated with pumping could affect the streams, springs, and other water sources that are considered sacred by Native American groups.

3.17.3.2 Assumptions

Rights-of-way and Groundwater Development Area Construction and Maintenance

- Native American consultation currently is underway and would continue through project construction and subsequent NEPA.
- Protection of any traditional cultural properties, sacred sites, and properties of cultural religious importance identified by the tribes would be in accordance with the PA and federal regulations.

Groundwater Pumping

The impact analysis of Native American traditional values for groundwater pumping is based on the same assumptions listed above for rights-of-way and groundwater development area construction and maintenance.

3.17.3.3 Methodology for Analysis

Rights-of-way and Groundwater Development Area Construction and Maintenance

- The project-specific issues for the effects analysis were identified based on the information provided by the tribes during Native American consultation, communication, and coordination, and during preparation of the ethnographic assessment.
- The analysis of potential impacts to Native American traditional values was prepared in accordance with NEPA. For purposes of this analysis, the effects of federal undertakings on properties of cultural and religious 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 Indian tribes into the Section 106 compliance process, and also strives to make the NHPA and NEPA procedurally compatible. Furthermore, under NAGPRA, culturally-affiliated Indian tribes and the BLM jointly may develop procedures to be taken when Native American human remains are discovered on federal lands.

Groundwater Pumping

- The analysis of groundwater pumping effects is based on information provided by the tribes during Native American consultation, communication, and coordination, and during preparation of the ethnographic assessment.

3.17.3.4 Proposed Action

The cumulative effects study area for Native American traditional values is the same as the analysis area (**Figure 3.17-1**). Past and present actions and RFFAs are identified in **Tables 2.8-1** through **2.8-4**, and **Figures 2.8-1** and **2.8-2**. Any other ground-disturbing activities within the cumulative effects study area could affect properties of traditional religious and cultural importance to Native Americans. As directed by law, cultural resources inventories

and government-to-government consultation would be conducted for any future federal undertakings, including private undertakings that operate under federal license, or on federally managed or private lands. Adverse effects to properties of traditional religious and cultural importance would be avoided or mitigated as appropriate in consultation with interested Indian tribes.

The proposed Project could adversely affect properties of traditional religious and cultural importance to Native Americans. Adverse effects that cannot be avoided where possible by means of project redesign or rerouting would be mitigated in consultation with interested Indian tribes. Measures to avoid, minimize, or mitigate adverse effects would be proposed in accordance with the PA, and in consultation with interested Indian tribes. If data recovery is determined necessary to mitigate unavoidable adverse effects, the process would recover a significant amount of data but ultimately the property would be destroyed. Over time, this represents a cumulative loss.

Groundwater development could cumulatively affect the springs and streams that are integral to the tradition and culture of indigenous populations in the Great Basin. According to tribal representatives, “all water is connected underground and therefore pumping in the basins would affect all seeps, springs, and streams in the general area despite the use of hydrologic modeling to determine impacts.” The general consensus among tribal representatives is that “while a select number of springs are designated as ‘sacred,’ all springs provide an important role in nourishing the plants and animals that form the cornerstone of a variety of many traditional practices (see Sections 3.5, Vegetation Resources; 3.6, Terrestrial Wildlife; and 3.7, Aquatic Biological Resources for a discussion of cumulative impacts to plants and animals). Groundwater pumping would further strain the aquifer that already has been affected by prolonged drought and global climate change.” Tribal representatives noted odd behavior by animals in the area, which is seen by tribal members as an indication of environmental change. The change in animal behavior is seen as a warning by the natural environment that human activity is damaging the area. Tribal representatives anticipate that groundwater pumping would add to these disturbances and disrupt the delicate balance of nature.

In the past, non-Indian settlement and development have cut off access to water sources or other resources considered sacred or as places of traditional religious and cultural importance by Native Americans. Groundwater pumping could have a cumulative impact by further reducing the presence of sacred sites or properties of traditional religious and cultural importance for use by Native American groups. Tribal representatives expressed concerns with groundwater pumping effects to five visited sites because of associated springs. Of the five sites, three would be cumulatively affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars, Turnley Spring, and Spring Creek Spring. The reader is referred to Section 3.3, Water Resources, for a comprehensive summary of cumulative effects to springs, streams, and other water resources. Cumulative effects to water resources identified in Section 3.3 could in turn cumulatively affect aboriginal lands that have provided, and continue to provide sustenance, as well as spiritual and religious renewal for the indigenous people of the Great Basin.

3.17.3.5 Alternative A

Under Alternative A, cumulative effects to properties of traditional religious and cultural importance to Native Americans as a result of rights-of-way and groundwater development area construction and maintenance would be the same as described for the Proposed Action.

Tribal representatives expressed concerns with groundwater pumping effects to five visited sites because of associated springs. Under this alternative, three would be cumulatively affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars, Turnley Springs, and Spring Creek Spring. The reader is referred to Section 3.3, Water Resources, for a comprehensive summary of cumulative effects to springs, streams, and other water resources.

3.17.3.6 Alternative B

Under Alternative B, cumulative effects to properties of traditional religious and cultural importance to Native Americans as a result of rights-of-way and groundwater development area construction and maintenance would be the same as described for the Proposed Action.

Under this alternative, three springs associated with sites visited by the tribes would be cumulatively affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars, Turnley Spring, and Spring Creek Spring. The reader is referred to Section 3.3, Water Resources, for a comprehensive summary of cumulative effects to springs, streams, and other water resources.

3.17.3.7 Alternative C

Under Alternative C, cumulative effects to properties of traditional religious and cultural importance to Native Americans as a result of rights-of-way and groundwater development area construction and maintenance would be the same as described for the Proposed Action.

Tribal representatives expressed concerns with groundwater pumping effects to five visited sites because of associated springs. Under this alternative, two would be cumulatively affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars and Spring Creek Spring. The reader is referred to Section 3.3, Water Resources, for a comprehensive summary of cumulative effects to springs, streams, and other water resources.

3.17.3.8 Alternative D

Under Alternative D, cumulative effects to properties of traditional religious and cultural importance to Native Americans as a result of rights-of-way and groundwater development area construction and maintenance would be the same as described for the Proposed Action.

Under this alternative, one spring associated with sites visited by the tribes would be cumulatively affected by groundwater pumping based on a 10-foot drawdown: Spring Creek Spring. The reader is referred to Section 3.3, Water Resources, for a comprehensive summary of cumulative effects to springs, streams, and other water resources.

3.17.3.9 Alternative E

Under Alternative E, cumulative effects to properties of traditional religious and cultural importance to Native Americans as a result of rights-of-way and groundwater development area construction and maintenance would be the same as described for the Proposed Action.

Tribal representatives expressed concerns with groundwater pumping effects to five visited sites because of associated springs. Under this alternative, three would be cumulatively affected by groundwater pumping based on a 10-foot drawdown: Swamp Cedars, Turnley Spring, and Spring Creek Spring. The reader is referred to Section 3.3, Water Resources, for a comprehensive summary of cumulative effects to springs, streams, and other water resources.