

ARCHAEOLOGICAL
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**BACKGROUND STUDY FOR
CONSULTATION WITH NATIVE AMERICANS
ON PROPOSED MINING DEVELOPMENT WITHIN
THE TRADITIONAL *TOSAWIHI* ('WHITE KNIFE') QUARRY NORTH
OF BATTLE MOUNTAIN, NEVADA, IN THE TRADITIONAL LAND
OF THE *TOSAWIHI* PEOPLE, WESTERN SHOSHONE NATION**

by

Mary K. Rusco
and
Shelly Raven

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INTRODUCTION

This report was prepared as background information for an Environmental Impact Statement for proposed mining activities by the Ivanhoe Gold Mining Company within the Ivanhoe Mining District, the location of the traditional *Tosawih* or 'White Knife' Quarry. The quarry, which is on land managed by the Bureau of Land Management (BLM), was the source of a predominantly white opalite used prehistorically and by the historically-known *Tosawih* Indians to make various flaked stone tools, including knives and projectile points. The authors were instructed to conduct a Native American study program to provide the background for consultation with tribal groups and individuals who retain traditional religious and other cultural ties to the quarry. This consultation was undertaken to provide adequate compliance with the American Indian Religious Freedom Act (AIRFA) and related legislation.

REASONS FOR CONSULTATION WITH NATIVE AMERICANS

Although there are several reasons for a Federal agency to consult with local Native Americans during the planning and environmental review of a project, such as the proposed mining development, the primary objective is for the agency to comply with AIRFA and related legislation and regulations. In addition to this statutory obligation, the government may learn from such consultation a great deal of historically and scientifically important information about cultural and archaeological resources of value to its general land-management interests.

AIRFA was passed by the U. S. Congress as an attempt to bring an end to a long history of federal restrictions on the free religious practices of Native Americans. Although the early federal policy was directed toward the discouragement or even prohibition of traditional religions, this has not been the case since the passage of the Indian Reorganization Act in 1934. Since that time, most of the federal actions that have been objectionable to Native Americans are probably the result of administrators' insensitivity and ignorance about traditional religions.

This act required Federal agencies, in consultation with Native Americans, to evaluate any administrative policies or actions that may adversely affect the constitutionally guaranteed free exercise of a Native American traditional religion, and to change policies or recommend legislation needed to avoid infringement on this right. Most agencies, including the BLM, adopted policies that provided for consultation on any specific actions that might impinge on a place, object or practice sacred to Native Americans.

Traditional religious practices vary a great deal from one North American Indian group to another, but all share a general world view. The earth with all of its biophysical components is believed to be a living being to whom people, and especially Native Americans, have an obligation of stewardship (Suagee 1982:10-12). Native religious beliefs and practices are grounded in this obligation, and are especially tied to traditional tribal lands. These fundamental qualities shared by all of the traditional Native American religions differ greatly from the Judaeo-Christian tradition that currently dominates the religious beliefs of most United States citizens.

The initial phase of the consultation for compliance with AIRFA and related legislation is the preparation of a background study based on a review of the relevant literature. This document addresses the following topics: 1) legislative issues, that mandate Native American consultation and study; 2) the identification of ethnic and tribal groups that would be potentially affected by the mining if it is

undertaken; 3) a summary of ethnographic and ethnohistoric information about these groups; and 4) the identification of known cultural and natural resources that are likely to be regarded by affected tribal people as especially sacred or otherwise sensitive. The last topic is also addressed as a result of consultation, and the final phase of the consultation concludes with a set of recommendations for the protection of significant cultural and religious properties and/or for the mitigation of unavoidable adverse effects by the proposed project on these significant cultural resources.

LEGISLATIVE ISSUES

The first Congressional action to require consultation with American Indians and other Native American groups on government policy affecting their religious freedom was AIRFA. Since the enactment of AIRFA, amendments to and/or revised regulations for several earlier pieces of legislation have explicitly included clauses that amplify AIRFA concerns. This relevant legislation includes the National Environmental Policy Act (NEPA) of 1969 and the National Historic Preservation Act (NHPA) of 1966. The Archaeological Resources Protection Act (ARPA) of 1979 (93 Stat. 721), passed after the enactment of AIRFA, explicitly references that act.

AMERICAN INDIAN RELIGIOUS FREEDOM ACT

AIRFA (P.L. 95-341) was a joint resolution of Congress passed in 1978 to affirm "the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise" their traditional religions. Its preamble acknowledges the First Amendment guarantee of this inherent right for all people, and that the lack of a clear Federal policy has often resulted in violations. The resolution recognizes that some laws designed to protect endangered species and some land management policies have unintentionally prohibited the use and possession of sacred objects and free access to sacred sites. The intent of Congress is clear: Native American religions are entitled to full First Amendment protection, recognizing that they differ in significant ways from dominant religious traditions in the United States. In spite of this, the resolution required no specific administrative action beyond an initial study in consultation with traditional Native American leaders to evaluate administrative procedures and report feasible remedies to Congress. Pending further Congressional action, compliance with the resolution has been determined at the agency level by provisions spelled out in the original report to Congress (Federal Agency Task Force 1979) and subsequent regulations and internal policy directives adopted directly in compliance with AIRFA, as well as the related legislation discussed below.

The Federal agency task force, appointed by the President shortly after passage of the act, undertook the mandated study and a report was filed approximately a year later. For its part in the report, the BLM reported that its land-use plans, guided by principles of multiple-use management, and its planning process provide

...the overall policy and direction to incorporate socio-cultural values, such as Native American religious concerns, into its land-use planning and management systems. Many of the potential impacts upon Native American religious freedom can be avoided through use of these existing systems.

One consequence of the assignment of AIRFA considerations to the BLM's "land-use planning and management systems" was raised by one BLM cultural resource specialist (Laidlaw 1990). There has been a tendency to confuse AIRFA with cultural resource management concerns. The latter, as specified in a set of laws and regulations, are primarily involved with the identification, evaluation and preservation of historic structures or archaeological sites. When government needs require actions that may adversely affect these structures or sites, procedures to mitigate the effects are designed and implemented. This is quite different from AIRFA, which invokes First Amendment protection of Native American religious practice and expression. The United States Supreme Court has traditionally required the government to demonstrate that a "compelling governmental interest" is involved when an action infringes on a plaintiff's First Amendment rights.

The BLM concluded its report to the task force by affirming that it

...will continue to evaluate its policies and procedures relevant to Native American religious concerns and will work toward providing full consideration of socio-cultural values in its land-use planning and management systems (Federal Agency Task Force 1979:33).

NATIONAL ENVIRONMENTAL POLICY ACT (1969)

Regulations adopted by the Council on Environmental Quality in 1978, after passage of AIRFA to update NEPA, clarify the role of Indian tribes in the NEPA assessment process (Federal Register Vol. 43, No. 230:44978-56007). Whenever a project can have an impact on Indian people "living on a reservation," they shall be notified in an early stage of the project and be invited to participate in the planning and research and to comment on report drafts before the public comment period. These regulations also include social and economic as well as religious impacts in the assessment.

NATIONAL HISTORIC PRESERVATION ACT (1966)

NHPA (80 Stat.915) established the National Register of Historic Places (NRHP) and the Advisory Council on Historic Preservation (ACHP). Amendments in 1976 (P.L. 94-422) and 1980 (P.L.96-515) expanded the NRHP and modified the role of the Advisory Council.

The National Register is a record of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology and culture. The Advisory Council, an independent federal agency, is the major policy advisor to the government on historic preservation. Section 106 provides for Advisory Council consultation on federal projects that would have an effect on a property on or eligible for the National Register, and provides a process for determining eligibility for the National Register. Amendments to NHPA specify that Indian tribes and other Native American groups are provided full opportunity to participate in the review of federal undertakings under Section 106 on non-Indian as well as tribally owned lands.

ARCHAEOLOGICAL RESOURCES PROTECTION ACT (1979)

ARPA, which expanded earlier penalty provisions for the disturbance of archaeological sites on Federal lands and specifies enforcement responsibilities of Federal land-management agencies, specified notification of Indian tribes prior to the issuance of archaeological excavation permits on their traditional lands. Supplemental regulations (43CFR Subtitle A, 1989 Edition) specify consultation with tribal officials or representatives when the issuance of an archaeological excavation or collection permit has an effect on a site of cultural or religious importance to an Indian tribe.

EFFECTIVE CONSULTATION: ENABLING NATIVE AMERICAN PARTICIPATION IN THE LAND MANAGEMENT PROCESS

Environmental and cultural resource protection legislation requires land managers to undertake a systematic review of the potential impacts of any land-altering projects before they can be started. AIRFA compliance, with its requirement for Native American consultation, is a part of this larger environmental/cultural resource review process. Other related legislation and regulations delineate the need for Native American participation in the land management process where traditional and/or tribal lands are involved.

The letter of these laws and regulations, but arguably not the spirit, is met by the simple notification by mail of a proposed project. These letters may be addressed to the nearest tribal council office. The notification, in this case, may not reach the most interested tribal members. Instead, an overworked and often unpaid tribal chair may respond with a form letter or ignore the notification altogether.

Recent AIRFA compliance efforts in Nevada and California (Bean and Vane 1982; Fowler, Rusco and Hamby 1988; Woods and Raven 1985; Stoffle et al., 1988) provide models for effective Native American consultation. In these projects, the following set of procedures was generally undertaken:

1. Consultation was initiated by mail, followed by telephone communication and in-person interviews with tribal officials and/or representatives.
2. An opportunity was provided for official representatives of relevant tribal governments and other tribal members who have expert knowledge about sacred and culturally important sites to view the project area.
3. Tribal members, including tribal council representatives and traditional religious leaders, were then given the opportunity to comment on the proposed project, and to make recommendations for the preservation of sacred, culturally important sites or traditionally, religiously important natural resources. They were also asked to recommend suitable action to mitigate any unavoidable adverse effects on these cultural, historic and/or religious resources caused by federal land management actions or policy.

The Native American consultations cited and described above were thus able to give involved tribal groups their mandated opportunity to participate in the environmental review process prior to the initiation of government programs that might adversely affect their lives.

The effect of Native American comments on a project in its planning stage depends upon several factors, including whether an alternate location for the proposed project is available and how compelling the

government's need for the project is. Another variable is the nature of the Native American comments. A frequent comment takes the form that the project will violate traditional religious teachings about the sacredness of Mother Earth and should not be undertaken at all. This recommendation would equate to the "no action alternative" considered in all Environmental Impact Statements. When such a comment is the only one received, even land managers who are sensitive to Native American religious concerns may see no way to avoid or mitigate impacts of the project.

A recent paper (Stoffle and Evans 1990) deals with this problem. The authors discuss the dilemma created by the Native American tendency to take the position that all of the land and its natural and cultural resources should be protected. They term this position "holistic conservation" and point out its religious basis in concepts about the sanctity of the earth. They then point out that when an agency's need for a proposed action is likely to override religious concerns, the Indian people must move to a consideration of how to save at least some of the threatened resources or at least mitigate impacts on them; otherwise they may forfeit their opportunity to take an effective role in land-use planning. For this, the authors propose a process of "cultural triage." By embarking on an attempt to rank resources on the basis of relative importance, scarcity, vulnerability or other reasonable quality, the Native American consultants can increase the possibility that some high-ranked resources can be saved, although others may be sacrificed.

There are ethical conflicts faced by tribal people in the course of attempting to save some resources at the expense of others. It is important that all tribal positions on the proposed construction project, both the no action alternative and mitigation recommendations, be included. A variation on this process was followed for the Native American consultation undertaken for the planned mining development in the traditional *Tosawihi* Quarry.

NATIVE AMERICAN GROUPS POTENTIALLY AFFECTED BY THE PROPOSED PROJECT

For millennia, what is now north central Nevada has been the homeland of the descendants and/or predecessors of a large ethnic group, the Western Shoshone (Figure 1). The particular project area was a core part of the traditional homeland of the White Knife sub-group of the Western Shoshone (Steward 1938; Thomas, Pendleton and Cappannari 1986). Kinship ties and the joint participation in various cultural and economic events linked this group with its neighbors, so that a much larger Western Shoshone population may have known of the quarry area or have used stone tools made from the *Tosawihi* opalite obtained through direct use of the quarry or by trade.

Northeast and north central Nevada is the location of numerous colonies and reservations where descendants of the White Knife people live (Figure 2). Besides those on reservations, some descendants live elsewhere in Nevada and surrounding states.

INVOLVED TRIBAL GROUPS

The Western Shoshone reservations and colonies where the majority of *Tosawihi* descendants are known to reside are located at Battle Mountain, Elko, Lee (South Fork), and Owyhee (Duck Valley), and Wells, Nevada; and Fort Hall, Idaho.

WESTERN SHOSHONE
TRADITIONAL TERRITORY

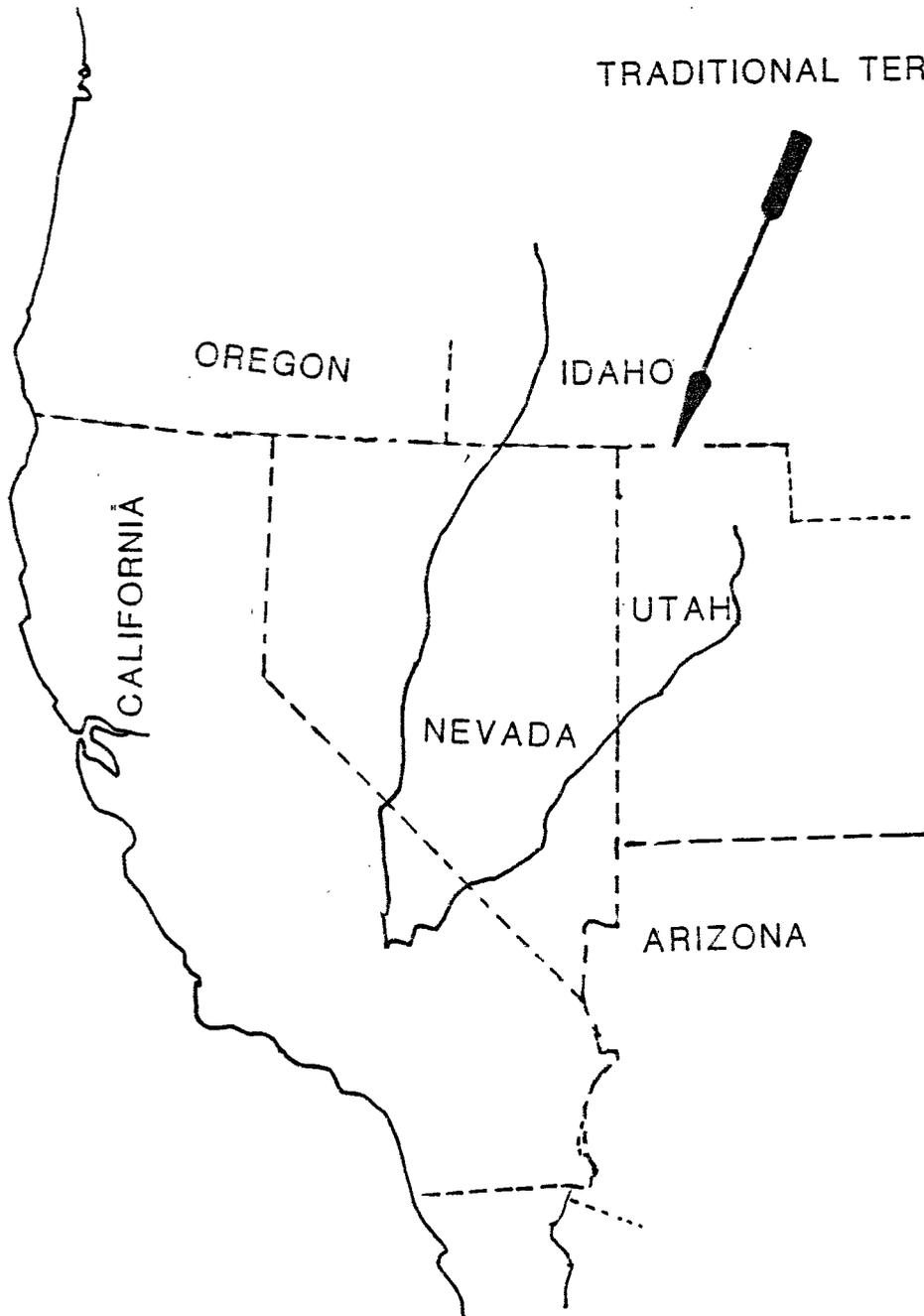


Figure 1. Map showing Western Shoshone traditional territory.

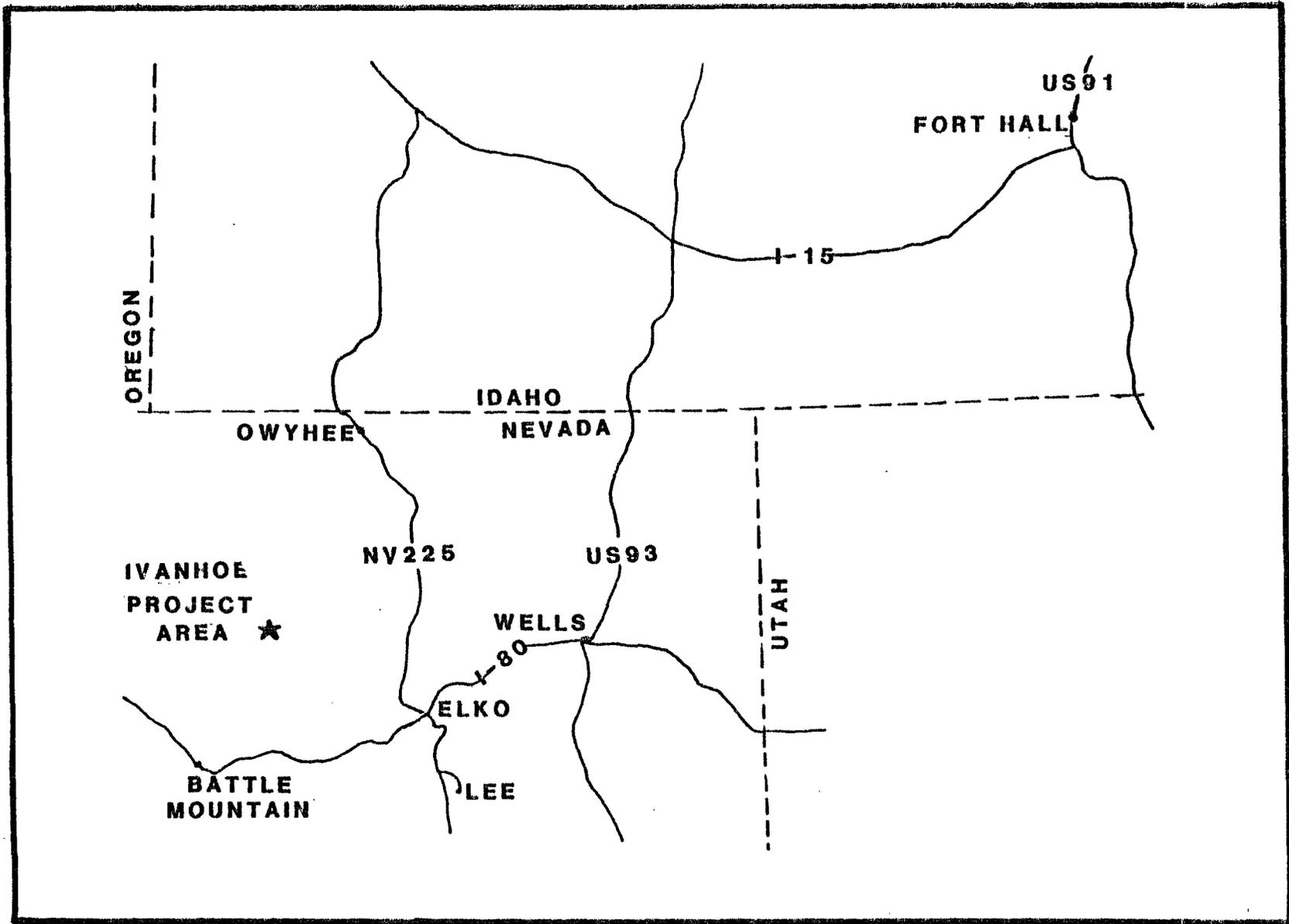


Figure 2. Map of the project area, showing location of tribal groups and individuals consulted.

Three of the reservations contacted as a part of this project, the Wells Colony and Duckwater Reservation in Nevada, and the Gosute Reservation in Ibapah, Utah, were added to the original list because *Tosawih* descendants currently residing there were particularly interested in the potential impact on the *Tosawih* Quarry area.

ETHNOGRAPHIC AND ETHNOHISTORICAL INFORMATION ABOUT THE AFFECTED TRIBAL GROUPS

The Western Shoshone peoples have lived in the Great Basin at least for many centuries. They speak Central Numic dialects and are included in the Uto-Aztecan language family. Linguistic (specifically, glottochronological) data have been used to estimate when the Numic languages diverged from a proto-Numic language. The Comanche people in Oklahoma, who occupied the Green River basin in Wyoming prior to the eighteenth century, speak a Central Numic language that now differs significantly from the language of the Western Shoshone in Nevada.

In view of the relative uniformity of the Numic languages over a large area in Nevada and southeastern California, many linguists postulate (after Lamb 1958) a population movement that began in the southwest Great Basin approximately two thousand years ago and fanned out until the present homeland was fully occupied a few hundred (ca. 600 or so) years ago (Miller 1986). Attempts to confirm this movement from the archaeological record have met with mixed success, and some archaeologists have argued for a northern-based spread into the Great Basin (cf. Swanson 1968).

The introduction of the bow and arrow into the Great Basin, the intensification of seed procurement and processing, the manufacture and use of plain grey brown utilitarian ceramics, and changes in rock art have been argued to mark the Numic movement throughout the Great Basin (Bettinger and Baumhoff 1982, 1983), but most of the evidence for a recent peopling of the Great Basin by Numic speakers has come from linguistic studies (Miller 1986:102-103). An alternate explanation of the linguistic data was offered by Goss (1977), who attributes the relative uniformity to frequent contact among the various dialect groups rather than their recent arrival.

The oral tradition of the Numic-speaking ethnic groups traces their occupation of the Great Basin back to when the earth was young--when "animals were people." Coyote and Wolf figure in the creation stories, with prominent mountain peaks in traditional Western Shoshone territory honored as sacred places connected with their creation.

The economic base of proto-historic Western Shoshone people was hunting and gathering food and other essential resources. They lived in small kin-based highly mobile groups, forming inter-group kin ties that provided access and familiarity within a large territory. Neighboring groups were granted hunting and gathering privileges within each other's territory, and the maintenance of boundaries between the Western Shoshone and neighboring ethnic groups was sufficiently flexible to permit both frequent intergroup marriages and large joint-use areas to exist. This social-political organization permitted a relatively large population to be sustained in the semi-arid Great Basin, because when food resources failed in one area, it was possible for groups to move to another where food might be more plentiful. Today, descendants of the proto-historic Western Shoshone belong to organized tribal groups that hold reservation lands or live in other communities, most of which are within their traditional homeland.

The Western Shoshone clustered in winter camp sites, dividing into smaller family groups for an extensive round of hunting and gathering from spring through early fall. Thomas (1981; cf., Fowler 1982) has pointed out that although the Western Shoshone shared this general settlement-subsistence pattern, there is a great deal of diversity in the ways individual groups actualized this pattern. In well-watered valleys, such as in major tributaries of the Humboldt River, large, more-or-less regularly occupied winter camp sites were present. In the drier central Nevada valleys, such as Kawich Valley, where resources were less predictable, "families had to travel to distant resource patches, and group composition in any given year was dependent on who chose which patch" (Thomas, Pendleton and Cappannari 1986:276).

All winter camp sites or villages were located near permanent springs. In the dry valleys it is unlikely that each camp site was occupied every year. Camp populations moved winter locations from one year to another in order to position themselves nearest the best pine-nut harvesting areas. One or more kin-based households would camp together for the winter, leaving for brief periods to hunt as needed. In the early spring they would divide into smaller groups, which moved about the territory hunting and following the harvest seasons of wild plants.

The nuclear family was the basic socioeconomic unit for the Western Shoshone. Winter village or camp group composition seems to have varied somewhat. Extensive kinship networks facilitated cooperation in communal game drives, and festivals provided the opportunity for marriages to be made. Respected senior men headed each winter camp group or even each major family.

THE *TOSAWIHI* SHOSHONE

The *Tosawih* Shoshone traditionally occupied the Humboldt River Valley around Battle Mountain, the lands drained by Rock Creek and other northern tributaries of the Humboldt from as far west as Golconda or Winnemucca and east to the Independence Mountains. In the summer they foraged as far north as the upper reaches of the Owyhee and the Snake rivers with some groups going south to Austin and Eureka (Harris 1940:39; Steward 1938:163). According to Harris (1940:39), the term "White Knife" was apparently "restricted at one time to those camps in the immediate vicinity of Tuscarora and Battle Mountain where white flint for knives and other articles is found." Information about the White Knife people comes from three general sources: ethnographic, ethnohistoric and archaeological.

Ethnographic Information

Two ethnographic sources account for most of the early information about the White Knife people (Steward 1938; Harris 1940). Julian Steward (1938:ix-xi) spent six months in 1935 and four months in 1936 collecting data on the Western Shoshone in Nevada, Idaho and Utah. This included a relatively brief time in Battle Mountain in 1935, probably no longer than a few days with a primary informant, JP, identified as having "ranged the [Humboldt] river between Ellison and Iron Point," wintering two miles upstream from Herrin. Another family, which wintered there, was that of Captain Sam, who was not related to JP (Steward 1938:162). Captain Sam was the White Knife leader who is credited with first asking for a reservation in Duck Valley (Inter-Tribal Council 1976:72-74; McKinney 1983:42). Of the four months in 1936, Steward (1937) seems to have spent the longest time (six weeks) at Fort Hall and with Shoshone people in Utah. It is not certain whether there were *Tosawih* descendants living at Fort

Hall in Idaho at that time; there are apparently few if any living on this reservation at the present time (Fort Hall tribal administrator, personal communication 1991).

Jack and Martha Harris spent three and one-half months at Owyhee in 1937 (Harris 1940:39), where they collected more detailed information about the proto-historic or early post-contact White Knife people in connection with a comparative study of acculturation. Harris did not specify whether he was writing only about the proto-historic White Knife and their descendants, or whether some of his information was from or about other Western Shoshone subgroups represented in the 1937 Duck Valley population. Clemmer (1990a:21) speculates that Harris used the term "White Knife" for all Western Shoshone people at Duck Valley Reservation, distinguishing them from the Northern Paiute people on the reservation. Harris's (1940:39) description of White Knife proto-historic or very early post-contact territory (see above) is essentially the same as Steward's (1938:163, 248). For other information Harris (1940:40) specifically distinguished between the White Knife and the Snake River Indians.

Harris (1940:44) estimated the size of the White Knife summer range at approximately 25,000 square miles. The extended range was so large because the winter settlements were dispersed over a relatively large area. Each camp would usually move over an area from 25 to 100 miles from its winter base. A winter settlement would consist of from two to ten camps spaced from 1/8 to 1/4 mile apart; houses were dome-shaped, made of willow and/or tule grass.

In complete agreement with Steward (1938, 1970), who found the "village" or "family clusters" to be the largest permanent organization of the Western Shoshone, Harris (1940:39-40) denied that the White Knife people had a band organization "with the traditional ethnological connotations of restriction and cohesiveness." He expressed doubts that the concept of land ownership "ever occurred to these people" (Harris 1940:45), and said that there was no period during the year when all White Knife people came together (Harris 1940:53).

Richard Clemmer (1990a, b) recently undertook a study of the persistence of *Tosawih* Shoshone culture and identity on several reservations in northeastern Nevada. Reviewing both the ethnohistoric and early ethnographic information, he concluded that the *Tosawih* were not a true band as usually defined: i.e., maintaining a distinct territory, with well-defined criteria for group membership, political leadership and authority, including an accepted process for determining succession. Instead, he offers the concept of the "ethnie" (after Smith 1986:22-31) at least for the early post-contact White Knife people: "a collectivity of people possessing symbolic, cognitive and normative elements as well as behavioral practices that bind them together as a population over generations and distinguish them from other populations" (Clemmer 1990a:22).

Ethnohistoric Information

The *Tosawih* Shoshone attracted public attention for nearly three decades after 1850. They figured in the correspondence of various Indian Agents sent to the Utah-Nevada Territory to estimate the number of Indians present (Forney 1858, 1859; Holeman 1852; Hurt 1857; Wasson 1862). They were also discussed in the report to the Commission on Indian Affairs by John Wesley Powell and George W. Ingalls (1874; Fowler and Fowler 1971). At least one contemporary travel book (Burton 1862) mentioned the group, as did reports of government exploration parties (Fremont 1845; Inter-Tribal Council 1976; Simpson 1869).

Some of these references placed the White Knife people far outside the generally-accepted limits of their traditional homeland, as far east as the upper Humboldt River (Wasson 1862) and Ruby Valley (Nye 1862), and as far north as the Snake River (Forney 1858). They are described by Hurt (1857) as well-equipped with guns and horses, and acquired a reputation as fighters and raiders. Raids on emigrant trains along the middle and upper reaches of the Humboldt River were attributed to White Knife parties (Holeman 1852; Inter-Tribal Council 1976:43). In a recent review of ethnohistoric information, Clemmer (1990a:19-20) concludes that the White Knife people, unlike other Western Shoshone subgroups, were mounted (prior to 1860), "[they] moved around quite a bit and did so en masse, as a group." Harris dated their taking of horses (except for food) as between 1850 and 1860. It was only then that the Shoshone "welded" into a band-like organization (Harris 1940:75-77).

Two treaties were negotiated with the White Knife and other Western Shoshone people (Clemmer and Stewart 1986:534-536). The first of these was a treaty of friendship between the Western Shoshone people and the United States. The U. S. government (1855) agreed to a payment of "provisions, clothing and farming implements." It was never ratified. In 1859, Jacob Forney, Indian Agent assigned to Western Shoshone country, initiated plans to establish a six square mile reservation in Ruby Valley. A farm was actually begun (Inter-Tribal Council 1976:39), but the reservation was never officially established. The second treaty, the Ruby Valley Treaty of 1863, was ratified. This was also a peace and friendship treaty negotiated by the United States and various Western Shoshone leaders. No land was ceded by the Western Shoshone, who were, however, to "abandon the roaming life" and move on to reservations when made available to them (The Treaty of 1863: Article 6, Inter-Tribal Council 1976: Appendix B). Signatures of Western Shoshone leaders were affixed to the treaty, including Buck, Po-on-ga-sah, and Tosa-weent-so-op, *Tosawihi* leaders (Clemmer 1990b:88).

Two Western Shoshone reservations were actually set aside in 1877. One of these was both small and short-lived:

In 1873 some Western Shoshones, probably White Knives, under Captain Sam, established a small settlement north of Palisades and began to farm. A farmer was appointed specially for them, and 52 acres were set aside by executive order in 1877 as the Carlin Farms Reserve. Almost as soon as the reserve was set aside, two settlers claimed they had filed on the land prior to its withdrawal. In spite of considerable opposition to their claim by Shoshones, their agent, the state's governor, and other settlers who thought Indians should be encouraged in the "civilized" pursuits of farming, Shoshones were evicted from Carlin Farms when the land was restored to the public domain in 1879 (Clemmer and Stewart 1986:534).

The Duck Valley Reservation, originally 289,667 acres, was intended for "all Western Shoshone outside of Carlin Farms," and when the latter was closed in 1879 Captain Sam and his followers moved there. By April 1879 approximately one-fourth of the enumerated Western Shoshone had moved to Duck Valley (McKinney 1983:55; Clemmer and Stewart 1986:535). Leaders of the *Tosawihi* families at Duck Valley were Captain George, Captain Sam, Henry, and Buck (Clemmer 1990a:64).

The first years of the reservation were marked by

...low selling prices for reservation crops and high purchase prices for supplies, nondelivery of government-promised rations, lack of support and expertise from the BIA [Bureau of Indian Affairs], and a corrupt agent" (Clemmer and Stewart 1986:535).

Residents began to leave in great numbers by 1882, and in 1884 only 250 Western Shoshone remained at Duck Valley. The remaining residents refused to move to Fort Hall. In 1886, the reservation was enlarged to accommodate a group of Northern Paiute Indians led by Paddy Cap and "such other Indians as the Secretary of the Interior may see fit to settle thereon." The mixed Western Shoshone and Northern Paiute population then stabilized at around 600 individuals (Clemmer and Stewart 1986:535-536; Inter-Tribal Council 1976:75-76; McKinney 1983:79-86).

After the settlement of the Nevada towns of Tuscarora and Elko, another ethnohistoric record was accumulated--newspaper accounts and an oral tradition of Indians farming, buckarooing on ranches, having fandangos, and other Indian activity in the traditional White Knife homeland (Clemmer 1990a:78-84, 1990b:18-20; Crum, personal communication). Many, if not all of the individuals mentioned in these accounts can now be identified as *Tosawihi* descendants.

THE *TOSAWIHI* ETHNIC GROUP: THE EARLY RESERVATION PERIOD TO THE PRESENT

Because of the early scattering of the *Tosawihi* people and subsequent intermarriage with other Indian groups, descendants of the *Tosawihi* Shoshone live on many of the Shoshone as well as other reservations in Nevada and surrounding states. Some live in urban, non-reservation settings. Many of these maintain some ties to the *Tosawihi* homeland between Battle Mountain and the upper Owyhee River, close to the *Tosawihi* Quarry area. Writing about Western Shoshone in general, Clemmer (1978:70) observed that

Although Western Shoshones are now incorporated into Euro-American economic pursuits, most still participate in traditional food-gathering behavior to some extent, primarily to enforce their cultural and psychological ties to the land....

Use of the White Knife homeland, specifically the *Tosawihi* Quarry area, was found by Clemmer (1990a:72-73) to involve hunting, seasonal buckarooing for White-owned ranches, long-term residency and buckarooing, gathering plants and other resources, and gathering the *Tosawihi* chert.

Data collected for hunting in the area up to and including 1988 revealed that "deer, rock chucks [marmots]...squirrels, and rabbit were hunted." One of Clemmer's (1990a:75) consultants reported "using the ranch kitchen where she worked to can the jackrabbit meat for use in the winter." One consultant recalled seeing his grandmother making a rabbitskin blanket.

Three of Clemmer's (1990a:75) consultants reported that they had buckarooed in the *Tosawihi* area; another was a camp cook, and a fifth had been married to a buckaroo. Ranches worked included: Betty O'Neill, Izenhood, Hadly, 25 Ranch, and Spanish Ranch, from 1927 to as late as 1965. Consultants

also reported that others would come to the area from Duck Valley, Fort Hall, Deeth and Starr Valley during the summer and fall for seasonal work, such as cutting, baling and stacking hay for the ranches.

Several consultants told Clemmer (1990a:75-76, 81) about the use of the area to collect red ochre and various plants, including willow material for making cradle boards. At least three of his consultants discussed making trips to the area to gather the white chert.

Finally, a number of burials were reported to Clemmer (1990a:79) from the quarry area and along Rock Creek to the south. The most recent, for which a date was given, was between 1920 and 1925, and one consultant told him that one of the last *Tosawih* Shoshone to live in the area had continued to care for the graves until he left in 1927. Other individuals were reported to have known ancestors buried in the region, but these were not interviewed by Clemmer.

RELIGION AND WORLD VIEW

Although all North American religions are tied to the earth, nowhere is this more important than in the Great Basin, where the balance between subsistence and an unpredictable environment was most delicate (Hultkrantz 1986; Miller 1983a, 1983b, Clemmer 1981). Hultkrantz (1986:631) sees Basin religion as "the result of a unique fusion of ecological and traditional factors." He sees it as adjusted to the biophysical constraints on a small hunting and gathering population, with religious goals oriented toward the "needs and patterns of subsistence and the small nomadic social units that prevailed." The belief that supernatural power (*Puha*) has permeated the earth since its creation in the myth age "when animals were people" (Miller 1983a:70) is a central feature in Basin religion.

A major religious goal is the acquisition and use or control of power. According to Harris (1940:56-57) the

...richest religious expression for Shoshonean life is to be found in the concept of *Buha*--supernatural power--and its embodiment in shamanistic practice... [E]very person must possess *Buha*, the life principle...to live.
[Note: *Puha* and *Buha* are different spellings of the same word.]

Special power is given to humans who have the discipline and strength to use it. It can come solicited or unsolicited in dreams and visions. In the Great Basin, the shaman obtains power to heal illnesses, injuries and wounds. Such power can also act as a preventative measure. Special powers aid the hunting of large game. Once obtained power can be used for the good of the individual or the community; it can also be used against individual or public interest.

Relatively few people were shamans or had special powers (cf. Harris 1940:57), just as in many organized religions, few are in the priesthood or other religious orders. Most people participated in a wide range of rituals associated with hunting, gathering, obtaining water from a dangerous spring, attending a birth, or burying and mourning the dead. These rituals, as well as the control and use of power were directed towards the balancing of the potentially dangerous spiritual powers which pervade nature.

Prominent mountain peaks are major sources of power. Mountains collect the most precipitation in the Great Basin and encampments were often clustered in relation to mountain ranges rather than valleys

(Steward 1938:232). In view of the importance of water in this semi-desert region, it is not surprising that water "is the keystone of Basin religion because power, with its affinity for life, was strongly attracted to water" (Miller 1983a:78). Power is also present in caves, particularly deep caves with tunnels and separate chambers, and where water collects. Animals, and to a lesser extent plants, have power and this power can be given to people by the supernatural spirits who control these species. Because power is attracted to all life, it remains present in places where people have lived, and particularly around graves.

Ceremonies involving dancing and other rituals are a part of Native American religious life. Two of these have been important to *Tosawih*. One is the *Gwinii* ceremony, which clearly has deep roots; the other is the Sun Dance, which is a much more recent practice.

The *Gwinii* ceremony was described by Harris (1940:53-54) as a six-day celebration held four times a year, in which round dancing, gambling games and feasting took place. He described how the ceremony, which he said was focused on health and fertility, was changed over the years under the influence of government agents. Well before 1936, three of the traditional occasions had been eliminated and the dances were held on the Fourth of July weekend. Although other dances introduced from elsewhere had been added, as well as many introduced games such as baseball, it remained an important enough event that Harris (1938:409) concluded it was the "most cohesive force" the White Knife people experienced. Steward (1939:265) objected to that conclusion, holding that the *Gwinii* was a "mere social dance" that exerted no cohesive force.

The Sun Dance is a "postreservation phenomenon" for the Western Shoshone (Jorgensen 1986:665). Invented on the High Plains by 1700, the dance was widely practiced by all Plains tribes. It was usually held after an individual made a vow to avenge the death of a friend or relative or to lead a war party, or was held to insure a good supply of buffaloes for a hunt. Jorgensen (1986:666; cf. Shimkin 1986:314-315) describes the original form briefly as follows:

...men danced for three or four days and nights to the accompaniment of drumming and singing. The dancers often underwent various tortures such as ritual fasting, thirsting, and mutilations, in a quest for power, good health, success in wars and on hunts, and the general welfare of the group.

By the time it reached the Northern Shoshone and Bannock reservation at Fort Hall, Idaho, in 1901, the Sun Dance had died out on the Great Plains, where it had been effectively suppressed by various actions of the federal government. With warfare and buffalo hunting no longer relevant, the purpose of the ceremony shifted to promoting the general health and unity of the tribe. Elements related to warfare and buffalo were dropped from the ceremony and some apparently Christian elements were added (Jorgensen 1986:666).

It is not clear when the Western Shoshone first became involved in the Sun Dance. Harris (1940:108), writing of the Duck Valley reservation in the mid-1930s, reported "the sun dance never reached the reservation, although a few of the natives go to Fort Hall each summer to participate in it." Western Shoshone apparently participated regularly in Sun Dances at Fort Hall. Jorgensen (1986:667) acknowledges that one was held at Elko in 1935 and possibly as early as 1918. More recently, Clemmer (1990a: 67, 70) reported that Sun Dances were held at Deeth, Nevada and later at Elko in the 1920s, at which time "some Western Shoshone became initiated."

Traditional Religion Today

It is probably the case that there are fewer traditional religious practitioners on Nevada reservations today than ever before. In 1936, Harris (1940:102-103) found eight shamans among the 670 Indians he visited on the Duck Valley Reservation. Few of the reservation population doubted the power of the shamans to cure illnesses, but some attributed this to the effect of their faith in their traditional ways. In contrast to curing-shamanism, Harris (1940:104) concluded that "other forms could not persist when the need for them had disappeared." In 1989, however, Clemmer (1990a:73) found a persistence of traditional rituals to enlist the assistance of spiritual beings, or "Little Men", in the hunt:

Hunting is done with the help of the Little Men. These Little Men cannot be seen but they are always there. They whistle like a bird. That's how you know they're there. This is still the way Shoshone hunt. They will guide you right to the animal if you pray to them. It's important not to do anything to change the land because if the land is changed, those Little Men will go away and there will be no more deer to hunt.

Four of Clemmer's (1990a:71) consultants

...volunteered strong opinions on "California hunters" who, they said, not only failed to pray to the spirit of the deer, but also wasted the game. In contrast, they said, Shoshone hunters could not get away with doing things that way and if too many "modern" Shoshones hunted like that, then soon, the Little Men and the animal spirits would go away and there would be no more game. Destroying the habitats of the Little Men by activities such as mining could also cause them to go away.

It is also true that the traditional religions have changed over the past hundred years. This is not, as many outsiders seem to think, because conversion to Christianity or Mormonism replaced the traditional religion. Many traditional religious practitioners have had an eclectic view that permitted them to add new religious practices to the old (Hultkrantz 1986:631; Stewart 1956). For example, the Native American Church, which uses peyote as a sacrament, combines Christian and traditional Native American elements in its rituals (Stewart 1986).

Changes have taken place to adapt to the changing circumstances in which Native Americans have found themselves over the past 100 years or so. Today, few have sought or been offered instruction in the traditional ways. Most Great Basin Indians speak their native language as a second language if at all, and in most families traditional teachings are no longer emphasized. Altered as it has been, the traditional religion is still practiced, if in a somewhat attenuated form (Bean and Vane 1982; Clemmer 1981; Hamby 1986-1988; Stoffle, et al., 1988; Rusco 1986-1988).

Some *Tosawih* and other Shoshone people heed the call of supernatural power and/or go to special power spots to receive power in visions (Clemmer 1990a:67-70). Of the people he interviewed in 1989, only *Tosawih* descendants seemed to be aware of power spots in the White Knife homeland. Four spots have been identified--two within the quarry area and two along Rock Creek downstream from its confluence with Antelope Creek, south of the quarry (Clemmer 1990a:68).

The persistence of shamanistic practices, now sometimes associated with the Sun Dance, actually may represent a resurgence of traditional religious practice by young people after the 1930s (Clemmer 1990a).

According to Clemmer (1990a:69):

...today, Western Shoshone religion has three primary expressions: Sun-Dancing; individual prayer to the spirits of plants, animals, power spots, and to Little Men; and use of power spots for vision questing, curing, or doctoring.

Other, largely social dances (local pow wows) continue to be held by Great Basin reservation groups. Usually confined to long weekends, in spring through early fall, they are often connected with a rodeo or other event. They may or may not have religious import, but they apparently serve to reinforce ethnic identity, and may well be termed a "strong cohesive force," thus continuing to fill the function Harris once attributed to the *Gwinii* ceremony.

At least two of the *Tosawihi* descendants interviewed by Clemmer (1990a:76) in 1989 reported a religious association for the *Tosawihi* chert, particularly in modified or worked form. Individuals collect artifacts made of the white chert, as well as unworked chert from the quarry. It is used for doctoring, and the adept keep some on their persons at all times. Later, one reported that a white chert knife was used to bleed the patient, and that a person with the power can cure a variety of diseases. In the light of this information, Harris's (1940:95) observation that "the Indians collect and prize the arrowheads and knives they find in the hills" is interesting, even though he did not specify whether the White Knife chert was particularly sought.

Tosawihi were found by Clemmer (1990a:70) to follow no particular set of religious practices, except for the use of the white chert as a source of power for healing and the use of power spots in the Rock Creek drainage. He did note that he found "a tendency for *Tosawihi* to be strong adherents and advocates of the Sun Dance religion, more so than non-*Tosawihi* Shoshone."

Projects like the major mining developments underway in the *Tosawihi* Quarry area would threaten power sources currently used by Western Shoshone people, including the white chert present only there. Such activities represent an intrusion on the sacred, regarded as dangerous by the practitioners of traditional native religions.

METHODS

The field work portion of the study had five components: initial contacts by telephone and mail; initial meetings at the various reservations and colonies enumerated above; interviews with individual consultants about the past and present religious and cultural significance of the project area, the *Tosawihi* Quarry; a trip to the project area; and a final meeting with all consultants to discuss the draft report and recommendations for management of the project area.

INITIAL CONTACTS AND MEETINGS

In late April and early May, 1991 letters and phone calls were made to tribal groups that were considered potentially affected, beginning with the list provided by the BLM. This list was expanded to include additional groups on the basis of information provided by tribal councils and individuals initially contacted.

A schedule of four meetings was planned:

- Trip 1: M. Rusco, S. Raven, C. Carroll
May 7: Battle Mountain
- Trip 2: E. Rusco, S. Raven
May 18: Wells, Lee
May 20: Owyhee (canceled on recommendation of consultants interviewed).

Members of the Elko Tribal Council attended meetings at Battle Mountain and Lee.

The project staff made a brief presentation illustrated by maps and 35 mm color slides of the project area. A period for questions, answers and comments followed the presentation at each meeting. This discussion was tape-recorded and subsequently partially transcribed. The project staff also kept notes during and following the discussion.

INTERVIEWS

Interviews were conducted on May 8, and May 19 through 22, at Battle Mountain, Ruby Valley, Owyhee and Elko. Twelve individuals were interviewed. These interviews were also taped and subsequently transcribed, and the interviewers kept notes as well.

TRIP TO QUARRY

Between June 1-3, three meetings and a trip to the *Tosawihi* Quarry area took place. Shelly Raven and Elmer Rusco lead this activity as project ethnographers, with archaeologist Mark Moore and photographer Bill Germino assisting. Karen Caddis-Burrell of ENSR was present.

A total of 12 individuals, representing the Sho-Pai Tribe (Owyhee), the Sho-Ban Tribe (Fort Hall, Idaho), Duckwater Reservation, the Western Shoshone Business Council (Owyhee), and the Elko Colony, participated. We had initially requested that two representatives from each place attend. The

representatives from Wells and Battle Mountain did not participate and alternates from the other groups were able, then, to attend. No responses to the invitation to the field trip were received from the South Fork Reservation at Lee, the Gosute Reservation in Utah, and Ruby Valley. Fort Hall, which did not arrange for an initial meeting, however, did participate in the field trip.

An initial orientation meeting was held with all participants following dinner, on Saturday, June 1. On June 2, the field trip began with a tour of the currently operating mine. An Ivanhoe Mining Company safety officer conducted the tour, which included the open pits and the leach pad, and an orientation. The purpose of the orientation was to make participants aware of where the proposed mining effort would take place. Participants then proceeded to the Intermountain Research (IMR) archaeological camp, located in Velvet Canyon.

During a walk down this canyon, Robert Elston and Melinda Leach of IMR discussed the procedures that archaeologists follow to test sites and conduct data recovery for mitigation of unavoidable effects, including arrangements for curation. They summarized results of their work to date. Following their presentation, time was allowed for questions and discussion.

Quarry sites and overhangs were visited in the canyon, then a trip was taken to quarry pits at an open site where an undisturbed cache of bifaces was present, and to one area where evidence of dense prehistoric activity, including prehistoric adits, had been exposed by trenches.

Meetings were held in the evening after the trip and again the following morning. Participants were given the opportunity to discuss the management procedures that they felt were appropriate, both among themselves and with project staff.

FINAL MEETINGS FOR REVIEW AND CONSENSUS

Following the field trip project staff prepared a report of findings made during the interviews, meetings and field trip. Copies of this report, illustrated by a series of photographs made during the field trip, were sent to all participants for their review and comments. Two meetings were scheduled, one on July 25 at the Elko Colony Arts and Crafts building and one on July 26 at the Tribal Building at Owyhee.

These meetings were conducted by Elmer Rusco and Mary Rusco. The Elko meeting was attended by nine individuals including the representatives of the Tribal Council of the Elko Band of the TeMoak Tribe of Western Shoshone Indians and the Western Shoshone National Council, as well as one individual from Battle Mountain, and one from Owyhee. Nineteen individuals, including two visitors from Mountain City, attended the meeting at Owyhee. Representatives of the Western Shoshone Business Council and the Shoshone-Paiute Tribes of the Duck Valley Reservation were present. Following these meetings, project staff conferred with the chairman of the Battle Mountain Band of the TeMoak Tribe of Western Shoshone Indians about their concerns.

Each meeting was begun with a brief summary of the results of the previous consultations and participants were asked for corrections and comments, as well as recommendations. Participants were then asked to see if there was one or more recommendations on which they could reach consensus. Responses were recorded on tape and transcribed. Staff members also took notes on responses.

RESULTS OF CONSULTATION

INTRODUCTION

The level of interest in the fate of the prehistoric quarries at *Tosawihi* was unexpectedly high. Several groups and individuals contacted ARS to request more information and the opportunity to participate. The trip to the quarry itself could have involved four times the number of people taken if logistics had not been a problem. Tribal organizations were very cooperative in setting up meetings, which were usually well-attended, and information on the whereabouts of informed individuals was readily given.

The post-contact dispersal of *Tosawihi* people found many of the band living on various reservations and colonies, some quite distant from the quarry area. During early decades of reservation life, Indians were not permitted to travel freely in their former homelands. It is not surprising that knowledge of and concern about the *Tosawihi* Quarry varies. In Battle Mountain and Owyhee, interest and information were both high, while most other groups knew less about the quarry prior to our visit. It became clear to us that *Tosawihi* descendants are present in all of the tribal groups we consulted. Although meetings were best attended and most concern for the quarry area was expressed by people in Owyhee and Battle Mountain, there was great concern expressed by *Tosawihi* descendants and other Western Shoshone people we met elsewhere.

The amount of inter-consultant agreement about *Tosawihi* Quarry and related issues likewise varied. Some topics, particularly those pertaining to medicine and power, evoked wide agreement, but the reports of historic period and current use varied, mostly because post-contact experiences were different. Familiarity with the locale apparently varies partly with the distance of their residence from it. Moreover, the revival of interest in *Tosawihi* lifeways appears to differ in each area.

Interests and concerns about the quarry centered around three topics, encompassing both past and present use: medicine and power, economic pursuits, and *Tosawihi* as a focal point for ethnic identity.

PAST USES OF THE QUARRY

Medicine and Power

The traditional religious importance of the quarry was: 1) as a source of several medicinal substances; 2) as a place with special spiritual (power) spots; and 3) as the only source of the *Tosawihi* chert or opalite, a material with special spiritual powers of its own. Healing is a religious practice among the Western Shoshone people. The ability to heal injuries and illnesses is a power which must be granted supernaturally and medicinal substances, whether plant, animal or mineral, are gifts of the spirit world.

Medicine: White Opalite and Red and White Tuff

Three minerals found at the *Tosawihi* Quarry were traditionally used in healing. These are the white opalite or chert, used to make tools sometimes used in healing rituals, and two rhyolitic tuffs, red and white, used as both paint and medicine. The toolstone was not viewed as intrinsically sacred, but seen

as becoming so when worked by the gifted, who could encourage the spirit in the rock to make people heal.

Although different names were used for one, it is clear that both a red and a white chalk-like substance were used both for paint and medicine. The red substance, *pisappih* or *tempisa*, actually red rhyolitic tuff, was mixed with grease and used primarily as a paint or rouge. Two other minerals present in the *Tosawihi* Quarry area are used for blue and yellow paint, and one consultant told us about greenish small rocks that come from the north side of the quarry and also the Cortez area, which are tied in a bag and are used to spiritually cleanse springs.

White chalky tuff (*aipin*) was also used for paint. *Aipin* was used primarily as medicine, in a variety of contexts. It was put in pouches for power, and (historically) kept in jars as medicine. One person's grandmother used it in doctoring in a paste form mixed with buffalo water or deer water. She prayed with an eagle feather in conjunction with this treatment. This was used to treat diarrhea. Another person reported that it was mixed with water and drunk as a purifying agent after fasting.

In general, little specific information is available about the uses of medicines, because of religious prohibitions against talk about the sacred.

Spiritual Spots

The *Tosawihi* Quarry is at the heart of a larger area used for power, which extended along Willow Creek and included the Tuscarora and Midas areas. People who wanted to have power for healing or prowess in hunting and warfare could go to special places at *Tosawihi* and Rock Creek, where they fasted for four days and received visions.

That the *Tosawihi* Quarry was definitely included in this area is apparent in the following statement of one consultant:

The White Knife [quarry area] is important to people...this is where they got their power. Doctoring comes from there.... It is a healing, gifted mountain.

Two places at *Tosawihi* were specifically mentioned in this context as places where vision quests were undertaken. Big Butte was a place to fast and pray, and people would leave offerings of white chert there. These offerings were said to resemble caches. Another area was identified north of Ivanhoe Creek where the edge of the mountain is especially steep. Both men and women who were gifted went often to many such places during their lifetimes. Often, they were given instructions by another medicine person regarding when to go.

In addition to using spiritual spots to receive special powers, young men would fast and spend the night on top of a high knob in order to be recognized as strong, brave men.

Trade in Medicine and Power

Some people felt that the primary trade extending from *Tosawihi* took place between medicine men. These gifted people exchanged "undeveloped" stone (quarry blanks, that is pieces of the material from which unworkable portions of the native rock had been removed) for elk, and also for antlers. They made knives for exchange to other gifted people as well. Individual trade for powerful objects was specifically noted between the *Tosawihi* and the Bannock. This was strongly differentiated from the utilitarian trade discussed below.

Special Qualities of White Opalite

It is clear that objects made of *Tosawihi* material were considered to be quite different from similar objects made of other materials. For example, carrying a white knife, sometimes in conjunction with *aipin*, was said to produce a powerful medicine that intimidated the Paiute, who were enemies. Alternately, a projectile point or knife wrapped in buckskin and worn around the neck could serve the same purpose.

A white opalite triangular tool (the size and shape of a Cottonwood projectile point) was also used in doctoring. The point was inserted into a split shaft, and hafted in the middle so that only a small portion of the pointed end protruded. This instrument was tapped with a small hammer against the skin of the knees, temple, arms, or legs, allowing bloodletting which was considered effective in treating various conditions, including high blood pressure. *Tosawihi* opalite was excellent for this purpose for various other reasons as well, including its durability, the quickness with which wounds healed, and the lack of scarring produced.

Medicine people also might instruct a patient to procure white chert as a protector. The patient might be told either to dig out a piece of rock that has never been touched by anyone, or to find an arrowhead envisioned by the medicine person. Some *Tosawihi* descendants would not collect a finished tool except when advised to do so by a medicine person. It is widely believed that perfect tools should not be collected, since they are either considered "owned" and therefore not available, or made by Coyote or a medicine person, rendering them potentially dangerous to the collector.

Tosawihi opalite was also considered an excellent material for projectile points used in warfare. Points were prayed to before fighting, and were considered to be capable of supernatural actions. For example, in one story, a *Tosawihi* man was visiting another tribe when it was attacked by people from the east. The warriors lined up, and the opponents' medicine man began riding back and forth in front of the line, taunting the warriors, and dodging arrows by ducking behind his horse's body. Then the *Tosawihi* man prayed to his point, and shot at the medicine man. His arrow went over the horse and killed the enemy medicine man. As a result, the enemy chief gave up.

In another story, the first contact one *Tosawihi* man had with Anglo-Americans occurred while he was hunting squirrels. The Anglo man waved his hands, then pulled a gun and shot. The opalite, however, protected the *Tosawihi*, causing the bullet to bounce off his chest, and the *Tosawihi* man drew an arrow and shot and killed the Anglo.

In yet another case, *Tosawihi* opalite made a man invulnerable to bullets. After breaking the law, he eluded police, and escaped first to the Ruby Mountains, and then to Duckwater, because of the chert medicine he possessed.

If *Tosawihi* opalite was primarily viewed as a protecting, healing substance, it could also harm. The red streaks in white chert were especially feared, and when encountered in pits, the pits were abandoned. This is thought to be the quarry's equivalent of menstrual blood, a powerful force that can kill. This symbolizes the female power of the quarry.

Economic Pursuits

Long before the mining of mercury and gold were envisioned there, the *Tosawihi* Quarry area was mined for the valuable white chert or opalite. This was not only used locally for tools, knives or arrow points, but was traded or bartered widely. The area was not only valuable economically for the chert, but it was also a place where game, various small animals and plants could be taken for food.

Tool Production

Trips to the *Tosawihi* Quarry in the past were envisioned as relatively quick visits by family groups, at the most consisting of 20 people. While everyone went to the quarry area, access to the toolstone was restricted to men and non-menstruating women. It was speculated that young men probably did most of the work in the quarry pits, with old men along as advisors. Most agreed that women were likely to have carried the opalite from the quarry. It was suspected that, just as families had separate sections of the river for salmon, they would also have had separate areas or routes through the quarries. Along these routes, bifaces and food were cached for the return trip in the fall, and while travelers could take other people's food caches if they were in need, caches of tools were owned by their makers. Such caches were often placed under overhangs in the canyons, and sometimes were marked with cairns.

Once out of the quarry area, both men and women apparently made the tools they needed from the bifaces they brought from the quarry. In one story, quarrying groups met at Izzenhood Ranch to hunt ducks, and competitive flintknapping took place between the women. In another, people placed bets on the prowess of various flintknappers. Women were seen as perfectly proficient flintknappers by most people, who reasoned that they made a great deal of use of knives, that they got good at making them because they did not have to move around as much as men, and that they would often need tools when there was no man around to make them. Women were regarded as naturally more competitive and so would strive for perfection in this pursuit. One person stated that women were the primary knappers because of their potential for destructiveness due to menstruation.

People were aware that heat-treating improved the workability of white chert, but only one person interviewed currently works it, and he has found it to be difficult to work. An attempt on his part to heat-treat the material was apparently not successful. Heat-treating consisted of digging a pit, placing the opalite in the pit, and covering it with dirt, then building a sage fire, and waiting for a day. This was said to maximize one of the excellences of the white chert: that it breaks in such large, long pieces.

The kinds of utilitarian items produced from white chert for local use varied. One woman compared these uses to a set of kitchen knives: a different size and shape biface for every purpose. Skinning was the most commonly cited use. Interestingly, unifaces were considered adequate for such jobs, while bifaces were the form in which toolstone was exported.

The way in which toolstone and various stages of workmanship was viewed is somewhat illuminated by the linguistic categories into which worked chert is divided. While *tempin* is rock, there are different words for toolstone, for example, obsidian is *puuppin* and chert is called *patsittempin* or *tosattempin*, the latter referring specifically to the white chert. All early-stage bifaces are called by the same term, which means approximately 'I am making this into a knife,' while late-stage bifaces are all called *Tosawihi* ('white knives'). A single term was used to refer to all of the flakes and chips produced while making a knife or other tool, but most people did not consider this debris to be worked stone.

Color preferences, or lack thereof, are also instructive regarding how toolstone was viewed. Except for medicine people and for making objects to be used as medicine, color was said not to make any difference, other than possibly the satisfaction of individual tastes. A wide range of white, pink, and grey cherts were glossed as "white" in the field. On the other hand, medicine people were said to have had specific color preferences (though these were not stated). Trade to the Sioux (possibly only taking place relatively recently) requires the export of pure white rock because of its symbolic association with purity.

Trade of Toolstone as a Commodity

People were ambivalent regarding the exclusive use of the quarry by the *Tosawihi* band. While some felt that trade accounted for all access to the toolstone by other people, others maintained that the quarry area was probably shared with neighboring Bannocks and Paiutes. One person even claimed that these Paiutes and Bannocks were also known as "White Knives," and that the quarry was host to four groups in four states. Other consultants disagreed strongly with this last assertion.

All agreed that *Tosawihi* opalite ended up very widely distributed. One man claimed it went to 11 western states, and was known far and wide for its quality, much as catlinite for pipestone achieved trans-American fame. It reportedly was traded as far southwest as Bishop, California, into Oregon and Washington (probably via the Nez Perce), and through direct contact as far north as Montana and as far east as South Dakota after horses were introduced. Trade relations were viewed as primarily coterminous with alliances, friendships, and shared territories. The Northwest Shoshone, or salmon-eaters, were close friends with the *Tosawihi*, and allowed them into their territory for fishing, for which they received opalite. The Bannock allowed access to elk and salmon in return for opalite. The pieces used in this trade were relatively early stage bifaces. The locations recalled for such trading encounters were both to the north and northwest; the Twin Falls and Weiser Crossing areas were singled out as important meeting places. Opalite was traded to the Nez Perce in exchange for horses.

As discussed more fully below, trips to the quarry were part of a seasonal round within the extended territory of the *Tosawihi* people. It was implied that the fall trip to the quarry was taken on the way to pine-nutting areas south of the Humboldt River, and that the caches retrieved at that point were either made into tools for personal use or traded to people around Wells or Ruby Valley.

Information on the state of the opalite when it was traded was somewhat speculative. One man, however, stated that large cores and early stage bifaces were probably too heavy to carry, and so would be reduced, but not to a finished knife, which would take too much time. One person stated that the Snakes wanted "undeveloped" toolstone in trade.

There was a strongly stated difference between trade and barter. Barter took place between individuals, and involved the exchange of finished knives for desired items such as quill or shell pendants. The trade of *Tosawih*'s resources between medicine men, discussed above, was undertaken in this individualized manner.

The Quarry Within the Seasonal Round

No one described the *Tosawih* Quarry area as a permanent or even semi-permanent living site; in fact, it was agreed that a person would visit *Tosawih* to procure toolstone or medicine briefly on the way to other destinations. One person laid out in explicit terms the unsuitability of the *Tosawih* area for habitation by saying that people needed water, ample building materials, plentiful food, and other people in an area where they would live. The *Tosawih* area possesses none of these attributes.

Most of the "destinations" pinpointed by consultants were north of the quarry, at least for summer resources. The Owyhee River Canyon has a plentiful groundhog population in spring, and was visited for hunting. The Snake River's salmon resources were mentioned a great deal as summer fare, as was the Bruneau Harris Creek area for the same reason. These areas also supported elk populations, and the mountains provided access to deer earlier than the desert floor. Bannock country across the Snake was visited for antelope, and further north, for buffalo. Trade at these locations and at Weiser Crossing in eastern Idaho also encouraged movement in this direction.

A southward movement is implied by the places where people reported pine nutting grounds. *Tosawih* people visited and intermingled with people at both Ruby Valley and Wells for these fall resources. Winters were spent at various locations around the Humboldt River, to facilitate access to spring waterfowl resources.

This is not to imply that the quarry area was perceived as utterly lacking in seasonal resources. Deer, groundhogs, ground squirrels, sage grouse, and more recently wild horses were said to be more plentiful in the past; their decline is attributed to the drying up of springs due to various mining episodes. All claimed that the exodus of buffalo and elk from the area occurred within the past 200 years. Several plant resources were also named, including Great Basin wild rye, wild carrot, and a plant with a big beet-like root (*dosa*), which is harvested in the fall, and which can be eaten, smoked or used as perfume. Another root plant, *suwegui*, which remains unidentified and is no longer in the area, was available in May when buttercups flowered. *Tuk*, a vine, had edible seeds and roots and was also used for cordage. The area between Big Butte and Squaw Valley was once rich in herbs, most of which have been destroyed by grazing.

All of these resources, and especially water, were more plentiful in the spring, and it was at this time that people thought the major quarry trips would take place en route to the north. Caches of bifaces and food resources were left in the quarry at this time for retrieval during a much briefer return in the fall.

Ethnic Identity

All of the consultants who identified themselves as *Tosawih*i descendants recognized that their band name was tied to the quarry north of Battle Mountain. Their understanding of past *Tosawih*i identity and the area and extent of their territory is not unaffected, however, by their knowledge of the more recent past when access to horses and variable reservation or colony affiliations modified prehistoric patterns. There was considerable variation, both from one consultant to another and among the various communities visited during this consultation, as to the composition of the *Tosawih*i band.

Many consultants agreed that the *Tosawih*i Band had been composed of "northerners" of one sort or another; some felt they had come from Montana, Wyoming, the Bruneau River, or the Columbia Plateau, and most stated that they traveled in the area encompassed by the Snake River on the north and the Humboldt to the south. One person asserted that the *Tosawih*i route involved a migration from Wyoming to Fort Hall, then to the Bruneau River, to Owyhee, across Sheep Creek, and finally to the Rock Creek area. Another claimed that the *Tosawih*i were the same people as the Bruneau ("northwestern") Shoshone, historically under Chief Pocatello, moving in from Paradise Valley to the north.

The time depth of the *Tosawih*i use of this area is unknown. While some implied a relatively recent arrival, it was pointed out by one consultant that the Comanche use the term "*Tosawih*i" to identify these people, and the Comanche left the northeastern part of Shoshone territory as much as 400 years ago, indicating considerable antiquity for the name.

Attempts to refine the past territory of the *Tosawih*i were muddied by the post-contact areas of residence, and provoked a list of the various towns, reservations, and colonies where *Tosawih*i were found in the late 1880s, such as Fort Hall, Owyhee, Golconda, Battle Mountain, Beowawe, Ruby Valley, Lee, Carlin, and Elko, which may or may not coincide with older patterns.

As the northernmost band of Western Shoshone, the *Tosawih*i occupied a buffer zone between neighboring tribes, including the Northern Paiute, Bannock, and Nez Perce, and were involved with these people in conflict and trade. The acquisition of the horse intensified relations with these, and even more remote, people. Contact with tribes of the Northern Plains, for example, appears to have increased; in the relatively recent past the *Tosawih*i traveled far north to go buffalo hunting, staying for as long as a year. Increasing mobility up to the present similarly encouraged relations with other reservations such as Fort Hall, where relatives lived, and the Sioux Reservation in Pine Ridge, South Dakota, where Sun Dances were performed.

One person suggested that identification with the quarry area intensified in historic times, when Chief *Tosawih*i "founded" the quarry. This consultant thought that the quarry and the people had another name before this.

Continuity and Change in Relationship to the Quarry

Obviously, much of the information above demonstrates that the quarry is still important enough to the *Tosawih*i people that even those who have never seen it knew about it, sometimes in great detail. Families continue to identify themselves as "*Tosawih*i" people, and to pass down their knowledge of the area.

Yet the immediately post-contact period did much to disrupt the relationship to the quarry, and to scatter the *Tosawihi* people far and wide. *Tosawihi* people dispersed, ending up in a number of different communities, working on a variety of ranches, and residing on widespread colonies and reservations.

During the early White settlement and reservation establishment period (1850-1900), visits to *Tosawihi* were probably impossible. First, it was very dangerous for an Indian person to be found in a "wild" area, since they were likely to be assumed "renegades" and shot on sight. Reservation people who wished to travel were required to carry passes that had to be stamped by the proper authority at their destination. Further, the suppression of native religion was still the official federal policy during this period, and if an agent even suspected that the quarry had religious significance, permission to visit would have been denied.

The forced schooling in government boarding schools of an entire generation of Shoshone had a more subtle but equally drastic effect. Taken from their families at an early age, and routinely discouraged from identifying as Indian in any way, these young people were deprived of the opportunity to learn tribal traditions from their parents. Much was lost, especially the kind of intimate knowledge of traditional territories that was necessary for a people who lived from hunting and gathering.

Visits to the *Tosawihi* vicinity in historic times usually occurred in the form of employment on the ranches and in the mines. *Tosawihi* people worked at the Silver Cloud mine south of the main quarry area, and at the Gold Circle Mine in Midas; some had mercury claims in the quarry area as well. Men were buckaroos in many ranches in the area, including the 25, Izzenhood, YP, Spanish, and Packer ranches, while the women often washed and cooked. They performed similar services in the small communities at Wells, Jiggs, and Golconda.

Through these people, and through others who continued to hunt or seek power in the quarry, specific information was passed on. Although doctoring had been outlawed on reservations, Jack Harris, a visiting anthropologist still remembered by some of the consultants, found that much knowledge of native healing practices was still retained in the mid-1930s. Today there is a resurgence in spiritual lifeways, and young people are becoming increasingly involved. It cannot be stressed enough how much information is retained in places like Owyhee, where people had never visited the quarry, but feel it is important to their lives and their identities.

PRESENT USES OF THE QUARRY

Although much of what we learned about the religious importance of the *Tosawihi* Quarry area related to the past (often the relatively recent past), it became clear during consultation that the use of the quarry area continues to be an important religious practice. More than one person noted that, due to the influence of Christianity and the long-established suppression of native religion, people were reluctant to talk about current traditional practices. Others expressed reluctance to talk about the sacred in general on religious grounds.

Medicine and Power

Both the red and white tuff and *Tosawihi* chert were displayed in people's homes during interviews, and were extensively collected during the field trip for medicinal purposes. The *Tosawihi* area in general is considered a power place; only Big Butte was specifically mentioned in this respect as still being used.

Trade as Medicine and Power

The main destination for *Tosawihi* chert outside of the immediate area mentioned by consultants is Pine Ridge, South Dakota. It is used in the Sun Dance, which is described below. At least one person still makes knives for healing.

Special Qualities of White Chert

People save worked opalite items as powerful heirlooms that are seen as "protectors"; sometimes people collect items for the same purpose. One person had a pouch containing what appeared to be an Eastgate point hung around his neck. He had it made by a professor from Idaho State, since he did not know a flintknapper, after being doctored and instructed that he and his family should wear such protectors. A second doctor, consulted by the patient later, confirmed the need for this.

Other people have collections of unworked opalite, tuff, and artifacts. One person knew of a private collection of 500 white chert points. Some felt that finished, complete tools should not be collected, while others believed that collection was acceptable if it is "alright in your heart." One man said that it was necessary to pray for luck in the search, and when an artifact was found, the knapper who made it should be thanked and something should be left in its place.

Tosawihi chert artifacts are seen as powerful items, particularly when in the hands of leaders and medicine men. Currently, the most actively pursued sacred use of *Tosawihi* opalite is within the context of the Sun Dance. The Sioux association of white with purity makes *Tosawihi* opalite and tuff especially suitable. It is uncertain how far back in time these practices extend, but one person claimed that 50 or 60 years ago people planned their seasonal schedules around dances at Fort Hall.

At the present time, the Sioux of Pine Ridge, South Dakota, use *Tosawihi* chert in their ceremonies. They hold it as sacred because it is pure white. They make from it a long, very slender, curved instrument, pointed at both ends, to pierce the pectorals in the Sun Dance, and use the triangular hafted form described above for bleeding the temples for purification. One person mentioned the use of "clappers" made of *Tosawihi* chert and hung around the neck, producing an identifiable ringing tone. A number of *Tosawihi* are Sun Dancers, and have close relations with the Sioux, serving as the source of the white chert for this purpose. One *Tosawihi* Sun Dancer had just returned from a trip to Pine Ridge a few days before we interviewed him.

Ground white tuff (*aipin*) is also used in connection with the Sun Dance. After fasting, this powder is mixed with water and drunk to settle the stomach before eating, and is also used in conjunction with purification in the sweatlodge.

Economic Pursuits

The economic pursuits at the *Tosawihi* Quarry now have little to do directly with the opalite. Some *Tosawihi* work in various northeastern Nevada mines. Families still hunt in the area, although they complain that the game is much depleted, but appear to do this as much as a cultural reaffirmation of "*Tosawihiness*" as to obtain meat.

Ethnic Identity

In the present, identification as "*Tosawihi*" often centers around a demonstrable relationship to Chief *Tosawihi-so'op* and/or other *Tosawihi* signers of the Ruby Valley Treaty in 1863. The personality, actions, and associations of these ancestors are relevant to the present-day locations, alliances, and animosities of the *Tosawihi* descendants, and so bear review.

Chief *Tosawihi*, as he was referred to by several consultants, is invariably viewed as a prominent man, although stress is alternately laid upon his status as a decision-maker and as a medicine man. Care was taken by several consultants to debunk the rumor that he and Chief Temoak were brothers, or related, although one person felt that they might have been fictively related as blood brothers. He is viewed by at least two consultants as the "founder" of the quarry, and the progenitor of its name. In one story, he was a medicine man who fasted at Rock Creek for power, and remained in that area because "something drew him like a magnet" to the quarry. He reportedly lived and died in the area, bequeathing his name to it.

In any case, the dispersal of the *Tosawihi* people occurred during the lifetime and leadership of the various signers of the 1863 Treaty. In one story, Chief Temoak had differences with Chief *Tosawihi* because *Tosawihi's* band was raiding the routes along the Humboldt, taken by emigrants from the United States. Temoak was always very friendly with the Anglo-Americans and so he sent out scouts with the cavalry to identify the friendly bands in the area. A band of *Tosawihi* under Captain Sam was not so identified, and so they were captured, marched to Carlin, and stockaded there. When their relatives found out that they were about to be shipped to Fort Hall, they begged Chief Tutua (of Austin) for help. Tutua sent a runner with a message that he could identify some of these people, who were left off at Owyhee under the leadership of Captain Sam, while the remaining unidentified individuals were taken on to Fort Hall.

Others *Tosawihi* people fared worse. According to another story, when the Anglo-Americans first came from Utah, they found 1500 Indians camped at Secret Pass in Starr Valley, all of whom were leaving the Humboldt to avoid contact with the foreigners. Soldiers from Fort Halleck were notified, and they burned the huts and tried to rape the women. *Tosawihi* people then scattered, some camping around Elko looking for work.

Still another story of conflict concerns the sighting of the cavalry while *Tosawihi* people were gathered at the quarry. In one version, Chief Tutua was their leader. People saw the swords glinting in the sun and ran all the way to the Humboldt. It is said that a similar gathering of the *Tosawihi* never happened again.

Some of the *Tosawih*i moved to Ruby Valley, but did not get along with Chief Temoak, who ran them off in 1865. When they left for Owyhee, they reportedly took with them 500 head of cattle given to Temoak. Others moved to Lee, where they remained, in spite of government encouragement to go to Fort Hall.

Other *Tosawih*i lived at Carlin Farms, a temporary but successful operation. When water rights became an issue with local Anglo ranchers, however, the farms foundered, and the government stopped providing aid and food. Finally an edict forced them to choose another reservation. Chief Buffalo, whose territory was around Halleck and Beowawe, led his people to Owyhee. Other accounts credit this leadership to Chief Sam.

In sum, the *Tosawih*i were scattered, yet the ethnic identification as *Tosawih*i continues. People have become members of their present separate communities, and are to a great extent identified on this basis, so there is some feeling that one locational group or the other constitutes the "true" *Tosawih*i, which works against cooperative action. On the other hand, the term *Tosawih*i is meaningful to individuals in each group. Moreover, in spite of differences of opinion about various events in the past, all *Tosawih*i descendants consulted were strongly united about the importance of the quarry as a traditional *Tosawih*i place.

INITIAL RECOMMENDATIONS

An important part of the consultation process was to obtain the views of tribal organizations and *Tosawih*i descendants as to how the *Tosawih*i Quarry area should be managed. Several tribal council representatives and *Tosawih*i descendants interviewed individually by project staff and/or present at a visit to the quarry volunteered opinions about this matter. These individuals were concerned with receiving information from the government and the mining corporation about plans, and wanted assurance that their access to the quarry would be guaranteed. They were virtually united in the conviction that the preservation of the natural and religious resources of the *Tosawih*i Quarry should be protected for the *Tosawih*i people and other Western Shoshone.

Interview Information

The concerns expressed during interviews related to the need for information about, access to, and protection of the quarry. Many groups felt that they had not been sufficiently informed at the onset of mining, and wondered why the current study began four years after mining for gold had actually begun. All wished to continue to be informed about and included in future decision-making regarding the quarry, and many people helped identify people likely to have concerns. Some groups wanted copies of the archaeological reports generated at the quarry.

Access to the quarry is important for all of the current uses listed above, and some felt that access would become even more important in the future. Several people noted that younger people today are seeking links with the past, and that, if anything, *Tosawih*i Quarry is becoming more important. A few people are trying to rejuvenate flintknapping, a skill which they want to pass on to their children. In addition, there is a revitalization of Indian spiritual ways, which are closely linked with the quarry.

The kind of protection desired for the quarry varies. One consultant felt that the mine should be built because people needed the jobs. This consultant, however, was not a *Tosawihi* descendant, and others felt that he may have animosity towards *Tosawihi* people that would be satisfied if the mine destroyed the quarry. He and others felt that if the mine could not be stopped, it was still on Indian land, and some payment should be made, and/or Indian people hired.

Others felt it should be given some sort of designation as an historic place, and either fenced off or just left alone. Opinions about archaeological mitigation again varied; some felt that things were left where they were for a reason, and should not be disturbed, but most agreed that it was preferable to remove them if they were in danger of imminent destruction. People were concerned that such collections be made available to the Indian people, but were divided on whether the best way to do this was through a museum or simply a return of the artifacts to the tribe.

By far, the most common opinion was that the quarry should be protected for future generations. This opinion was closely linked to the larger issue of Western Shoshone land claims, and several consultants expressed the opinion that the Western Shoshone and not the federal government should manage the land and make decisions as to whether it should be leased for mining and, if so, what terms were acceptable.

The Western Shoshone land claims issue is relevant to any discussion of land management within the territory covered by the 1863 Treaty of Ruby Valley. In 1985 the U.S. Supreme Court, in the Dann case, decided that the Western Shoshone people had been paid for the land, which the Indian Claims Commission had assumed they had lost "by gradual encroachment" on or before July 1, 1872. The issue, however, cannot be considered settled. Neither the Claims Commission nor the Supreme Court examined the arguments of the Western Shoshone traditionalists that the land had never been ceded. Moreover, the only court which did examine this issue--the 9th Circuit Court of Appeals in an earlier stage of the Dann case--agreed with the traditionalist position. The Western Shoshone traditionalists continue to assert their land claims vigorously.

In reference to the *Tosawihi* Quarry, these assertions include:

1. The quarry is on traditional Western Shoshone land; Western Shoshone people do not need anyone's permission to go on it;
2. The Western Shoshone should be paid rent by the mining company if they are going to mine this land;
3. The Western Shoshone should determine what happens to the artifacts taken from the land.

These assertions are essentially the ones made through the Western Shoshone National Council and various other groups to the executive branch of the federal government, to Congress, and to the general public.

Discussions During the Quarry Trip

The trip to the quarries provided a different view of the issues, since both the resource and the impacts on it were clearly at hand. In some cases, people were able to be much more specific in their recommendations. On the issue of the acceptability of the collection of artifacts, people behaved

differently than the interview data alone would have suggested. For these reasons, the observations made on this trip are treated separately.

The general consensus on the quarry trip and at the initial meetings was that the mine should not destroy this resource. Among other kinds of values, the most common concerned the availability of *pisappih* and *aipin*, medicines made by powdering tuff, and access to opalite as a primarily protective device, for example to use as a uniquely White Knife talisman or in the Sun Dance.

In the meetings that followed the quarry trip, much of the focus revolved around the appropriate mitigative measures to be taken. Many felt that a part of the archaeological collection should be available to *Tosawihi* people through a museum exhibit; some felt that all artifacts should be returned to the tribe.

At least one consultant felt that the undisturbed cache that they were shown should be collected by *Tosawihi* people to protect it.

During the field trip, no specific locations were pinpointed on the ground to be particularly culturally or religiously significant. Instead, the entire quarry area was regarded as sacred and important to their people. The participants provided little specific information beyond identifying the connection of the quarry with their identity, recognizing the white chert which many had as heirlooms at home, and identifying the presence of *pisappih* and *aipin*.

People felt strongly that the quarry should be preserved for their children, and several people noted that the generation now in their thirties was quite concerned about revitalizing their identity and passing it on to their children. Pieces of tuff and non-tool white chert were collected by many to take home.

In addition to these concerns, people interviewed as well as others visiting the quarry were also worried about water and air quality, and felt that they needed to look beyond the religious aspects of the quarry. The potential for leaks in the cyanide leach pad was an issue of concern, as was the amount of water being drained from local springs to supply the mine. People believed the *Tosawihi* springs to have been drying up for several years now, with a resultant decline in game.

In summary, there appears to be great interest and concern among tribal organizations and *Tosawihi* descendants about the fate of the *Tosawihi* Quarry, and a strong need for information, access, and protection, and the leadership of various groups is mobilizing Indian people for action. Many stated that people only now were rediscovering the importance of *Tosawihi*. As noted above, the Battle Mountain Band Council has passed a Resolution protesting the potential destruction of the quarry, and other such resolutions may follow.

One man summed up everyone's feelings eloquently: "Medicine, survival, trade, identity: everything is done better with chert."

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Discussion

Consultation with Native American tribal groups and individuals was undertaken in compliance with AIRFA and related legislation to determine the effects of additional mining in the Ivanhoe Mining District on these groups and individuals. In addition to a determination of effects, the purpose of the consultation was to elicit recommendations from Native American consultants concerning procedures which would avoid adverse effects or, in the event these effects are unavoidable, would mitigate them.

A preliminary literature review was made to summarize existing ethnographic and ethnohistorical information about the affected tribal groups, specifically the *Tosawih* subgroup of the Western Shoshone. The most clearly relevant information was recently collected and reported by Richard Clemmer (1990a, 1990b). He was able to interview 22 Western Shoshone, who were self-identified and/or identified by others as descendants of the *Tosawih* subgroup. To insure that the present study enlisted as many individuals who are knowledgeable about the former and present uses of the *Tosawih* Quarry area as possible, Clemmer and other recognized authorities on the Western Shoshone were contacted. From information they supplied it was possible to compile a list of tribal groups and individuals to contact (Appendix 1).

Tribal councils of eight Western Shoshone tribal groups, the Western Shoshone Council of Elders and the Western Shoshone National Council were contacted, as well as several individual descendants of the *Tosawih* Band of Western Shoshone, including religious leaders. Meetings were held in Battle Mountain, Elko, Lee, Wells and Owyhee, Nevada; the nature of the proposed mining development was explained and a map of the quarry area and color slides of prominent landmarks and archaeological remains in the area were shown. Interviews were conducted with eleven individuals following the orientation meetings. The last part of the initial consultation was a field trip to the *Tosawih* Quarry area, which in turn was preceded and followed by additional meetings. Western Shoshone participants in this consultation are listed in Appendix 1.

Results of the initial consultation were drafted for the final report and summarized and sent to all participants for their comments and corrections. Finally, two additional meetings were held, one at the Elko Colony Arts and Crafts building and at the Owyhee Tribal building, to review the draft results summary and to arrive at specific recommendations. Following these meetings, the draft summary of results of consultation was revised to take comments and corrections into consideration, and now comprises the section of this report immediately preceding the present one. The following recommendations were drafted on the basis of discussion at the meetings.

Conclusions

Much of the *Tosawih* Quarry area has been regarded by the BLM, at least since 1982, as eligible for the National Register on the basis of its scientific (archaeological) values. This has provided a measure of protection for scientific, but not necessarily religious and cultural values. Subsequently the BLM became aware of the quarry area's cultural and religious values as well. It was the purpose of the Native American consultation reported here to determine what cultural and religious values the area may have for contemporary Native American people, to document a preliminary finding of eligibility for the National Register under criterion A (36 CFR 60.4) and to use this information as a basis for planning appropriate management procedures.

The findings of this study support the conclusion that the *Tosawihi* Quarry area is a culturally and religiously significant area in the traditional homeland of Western Shoshone people. It thus meets the criterion for eligibility on the National Register as a Traditional Cultural Property (36 CFR 60.4) following guidelines set forth in the National Register Bulletin 38 (Parker and King 1990).

The specific findings of this study document the past and present importance of the *Tosawihi* Quarry area as follows:

1. The area is regarded as a sacred place by many Western Shoshone people today as a source of medicine traditionally used for power in healing and for protection and success in warfare;
2. It is the location of special power spots used traditionally in vision or power quests;
3. It is remembered in the oral tradition of Western Shoshone people as an economically important place visited regularly on their seasonal treks between the Humboldt and the Snake River valleys;
4. The use of the area to procure a highly knappable opalite, as well as a large variety of both large and small game and edible plants, is both recalled and confirmed by archaeological study of the area for at least 10,000 years;
5. Numerous open camp sites and rockshelters are present in the area attesting to its seasonal occupation throughout the use of the quarry, confirming the oral tradition recalled for this study;
6. The use of the area both as a source of religiously important materials and as the location of power spots continues to be a major part of the religious practice of many Western Shoshone people today, particularly those who identify themselves as descendants of the *Tosawihi* band;
7. The *Tosawihi* opalite, when made into a knife or other implement by a gifted healer, is known to be used in contemporary traditional religious, healing rituals throughout the western United States, according to Western Shoshone religious practitioners; the white chert is valued by Sun Dancers on the Pine Ridge reservation in South Dakota as well as to Western Shoshone Sun Dancers;
8. Finally, in addition to providing the setting for important traditional religious practices, the *Tosawihi* Quarry area is central to the ethnic identity of these people; those who still go to the area to hunt or to collect the medicines continually renew their ties to the area.

The above findings strongly support an evaluation of cultural and religious significance of the study area in terms of eligibility for the National Register as a Traditional Cultural Property. As such, both its cultural and religious values merit protection from the potential impacts of the proposed mining project and any archaeological investigations which may precede it. As a place central to Western Shoshone traditional religious practices and beliefs, it falls under the protection of AIRFA. Although most impacts

that the proposed project may have on archaeological sites or historic structures can be mitigated by a program of archaeological and historic data collection prior to the mining, it is unclear whether the concept of mitigation is relevant to a potential infringement of a traditional cultural and religious practice that remains important to *Tosawihi* descendants. In the paper cited earlier, the author points out that

...agencies remain vulnerable to claims of infringement if they cannot document that the issue of potential religious infringement has been evaluated and weighed against a compelling public need (Laidlaw 1990:241).

However, in the event the agency can demonstrate compelling public need, Native Americans may find it in their interest to introduce the idea of mitigation in negotiation with land managers and other interested parties. The mitigation concept would enable the *Tosawihi* descendants to pose alternative government actions that would allow them to continue their traditional religious practices in the *Tosawihi* Quarry area, although with some limitations imposed by continued mining.

Recommendations for the protection of the *Tosawihi* Quarry area and some proposed actions that might protect some of its traditional cultural and religious values were made during the consultation, including the two final meetings.

Recommendations

The consultation process resulted in two kinds of recommendations: those recommendations on which participants reached consensus or near consensus and those made by smaller subsets of the participants. The first included the "no action" alternative and the recommendation for continued consultation with the *Tosawihi* and the tribal groups of which they are members concerning management decisions about the *Tosawihi* Quarry. The second set of recommendations were primarily concerned with mitigation procedures to be adopted if the government decides against the no action alternative. These are discussed further below.

The No Action Alternative and Continued Consultation

Tosawihi descendants and tribal representatives present at the final two meetings were able to reach consensus on two recommendations:

1. No further mining or other destructive activities, including archaeological study, should be undertaken in the quarry area.

For tribal elders and many of the younger tribal members consulted no mitigation is actually possible for the destruction of sacred and culturally significant places in their traditional homeland. These individuals were unable or unwilling to contemplate any government actions or programs that would lessen the effect of this destruction on their lives.

One consultant, a religious leader, expressed it this way:

That's the reason why I've been in that Rock Creek prayin' for a long time, you know, this *Tosawih* Quarry. Even the White Man begin to understand today what it means to have those things preserved. I think that if enough of us, Indian and White together, we can have it preserved for the future use.... See this White Knife quarry...this is where we use for doctorin', for healing. We use it for a lot of things...knife, arrowheads, skinnin' deer with. Today we still use it some places....

Another consultant, a member of a *Tosawih* family by marriage, wrote the following:

...everything possible should be done to encourage the Government and the mining company to preserve the site [the quarry area] as a Cultural Site not just for the Shoshone people, but to contribute to the history of Nevada and the United States. This society seems to be rushing pell-mell into cultural oblivion. Perhaps that is because so many of the people that have immigrated to this country left their culture behind in what ever foreign country they came from. We must find ways to retain the culture indigenous to this country.... We are so concerned about exploring space that we have no time for an ancient society here on earth if it stands in the way of "progress."

A younger *Tosawih* descendant asked about the No Action Alternative:

One question I'd like to ask...is about this No Action Alternative...a lot of Indians are comin' to think, "Well, this is what we're faced with." It's kind of like, you know, this is what the government's gonna tell us. It's what's gonna happen. We have other alternatives. We got this No Action Alternative which means the further protection of this mine [quarry area]...maybe we should use this as a basis to start callin' our Congressional people for the change of the 1872 [mining] law... for protection of cultural and historic sites.

Other individuals and tribal representatives, who agreed that "no action" was the preferable alternative, could nevertheless envision mitigation measures. Some of these individuals, in fact, were skeptical that the no action alternative was feasible, and believed it was necessary to find other acceptable alternatives. The entire group, however, could agree on the need for their continued involvement in planning and decision-making.

2. Tribes and *Tosawih* descendants should be notified of further planning and decisions about the quarry area, and provisions should be made for their participation in planning and decision-making.

For the individuals and tribal representatives who were interested in developing various mitigation procedures, this continued involvement was viewed as essential. They envisioned a process of negotiation to work out the details of adequate mitigation procedures. The following recommendations are for general mitigation procedures.

Native American Recommendations for Procedures to Mitigate Additional Adverse Effects on the *Tosawihi* Quarry Area by Mining

The following five mitigation procedures were made by individuals present at the two final meetings or were otherwise communicated to the project staff. They are listed in what appeared to authors of this report to represent the highest level of consensus.

The first two mitigation recommendations received almost general agreement except for those traditional religious practitioners who believe that the destruction of sacred sites in their traditional homeland is such an overwhelming disaster that no mitigation is possible.

1. A significant portion of the quarry area should be set aside for preservation and dedicated to the free access and use of the *Tosawihi* and other Western Shoshone Indians for religious and cultural activities.
2. Access to the quarry area by Indian people should be guaranteed.

The protected area should be large enough to permit the collection of *Tosawihi* chert artifacts and other medicinal minerals for use in healing and religious rituals. Velvet Canyon was suggested by some participants as the area to be protected and set aside for this purpose. The protected area should also include Big Butte, so that it could continue to be used in vision quests.

The next two recommendations refer to the removal and protection of sacred objects from the *Tosawihi* Quarry Area prior to any additional mining or other destructive action.

3. *Tosawihi* chert and other sacred mineral resources in the quarry area should be moved under Indian supervision prior to any additional mining. It should be placed in an appropriate, secure place for the continued use by Indian people for religious and cultural purposes.

Before mining, all *Tosawihi* chert, *pisappih* and *aipin* should be removed carefully and placed in a safe place for the subsequent use of Indian people. Some participants suggested that a securely fenced area within the general quarry area would be appropriate.

4. Archaeological excavation and the curation of archaeological artifacts prior to any additional mining was recommended by some participants in the consultation process.

Excavation of artifacts should be done carefully. A cooperative effort of archaeologists and *Tosawihi* descendants and tribal representatives was seen as needed. Curation of artifacts should be in a museum where *Tosawihi* people and other Western Shoshone can have ready access to see exhibits and collections;

- a. Such a museum should be in *Tosawihi* country such as the existing Northeastern Nevada Museum in Elko;
- b. A tribally-operated and controlled museum was envisioned by some participants.

A need for the involvement of tribes and individually concerned Indians was seen as an essential part of either alternative.

Finally, one mitigation measure was proposed by a single tribal leader, reiterating a response he had made at an earlier date to an inquiry from the BLM.

5. Economic measures to mitigate adverse effects was proposed by one tribal leader, not a *Tosawih* descendant. In his view, the destruction of the area due to mining was inevitable. It was his opinion that the Western Shoshone people should be paid rent for this use of their traditional land and that there should be employment at the mine for tribal members.

The tribal leader who proposed this alternative was interviewed during this study, but not present at the field trip or any of the meetings. No other participant in the consultation process brought up the matter of economic compensation as the sole appropriate mitigation measure.

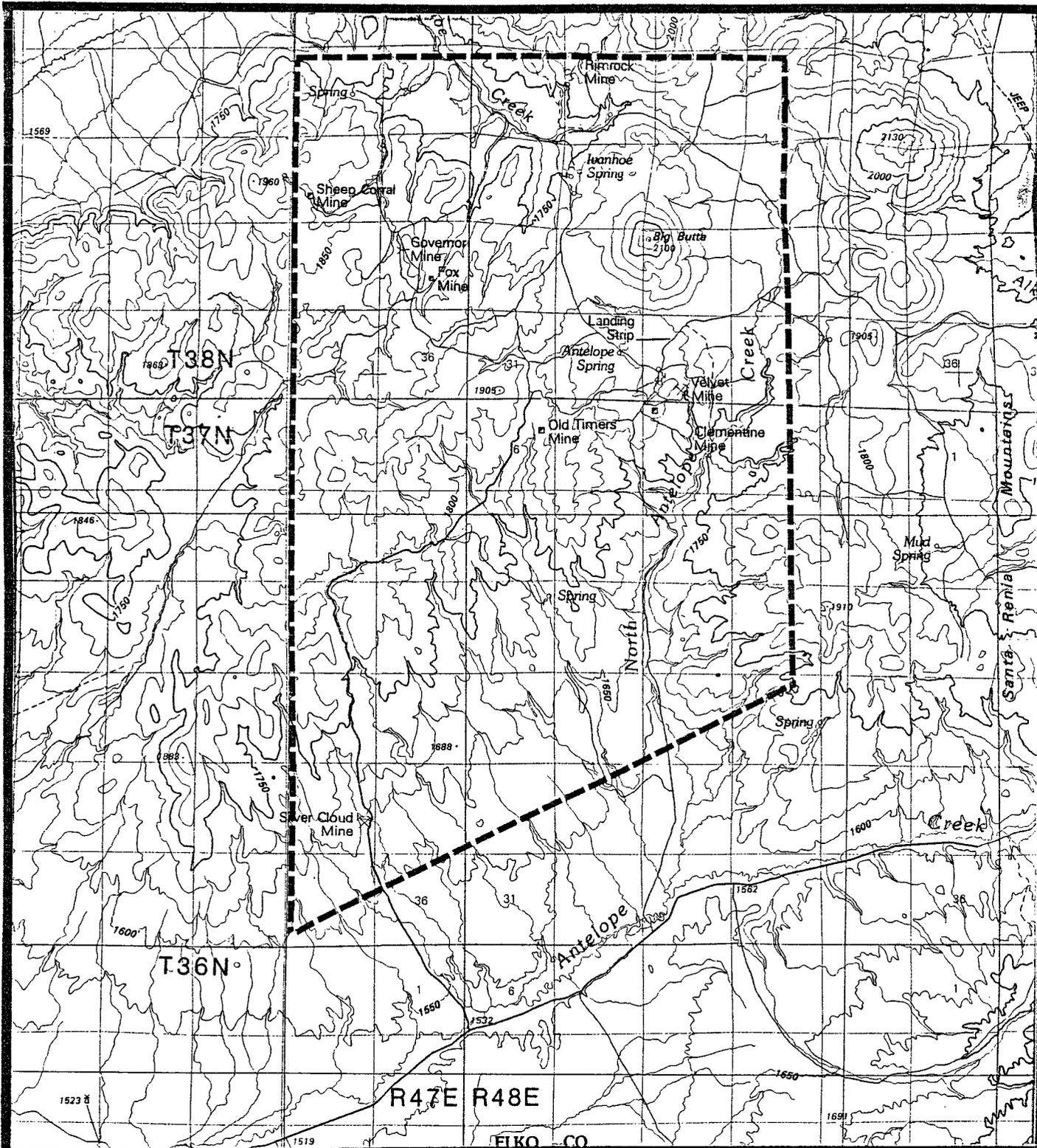
CUMULATIVE IMPACTS ON CULTURAL VALUES OF NATIVE AMERICANS

Cumulative impacts on cultural values of Native Americans can include actions not directly related to the proposed mining development, and can include impact on values outside the geographic area of direct impact as well. Actions that can impact these values include studies undertaken prior to the proposed mining development, including archaeological, geological and other studies and construction activities (such as road-building) that may involve alteration of the surface of the earth. Because the mining development brings people into the area, increasing the traffic into and throughout the quarry area, the surrounding countryside can be subject to impact. The geographic area of cumulative impact is shown on Figure 3. It is in the south central portion of the traditional homeland of the *Tosawih* people, which extends from the Humboldt Valley between Golconda and Rock Creek, north and northeast to the South Fork of the Owyhee River and along that river valley north to the Snake River Valley.

Consultants have identified a series of areas near and within the *Tosawih* Quarry area that are of equal or near-equal importance as the quarry itself. These include:

1. Known historic burial sites and a traditional power or vision quest spot on Rock Creek, near a proposed dam site, south of the quarry area;
2. The confluence of a hot creek and cold creek where Rock Creek enters a steep canyon northwest of the proposed mining development;
3. Two springs, one hot and one cold in the Tuscarora Mountains;
4. The creek below Midas;

as well as more distant areas within traditional Western Shoshone country.



Taken from USGS Tuscarora, Nev. 1982

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Figure 3. Cumulative Impact Area Location Map.

Within the cumulative impact area, specifically sacred spots include:

1. All water sources, specifically several springs near Big Butte, including Antelope Spring, Buttercup Spring, Ivanhoe Spring and another spring at the head of Little Antelope Creek, approximately one kilometer east of the cumulative impact area;
2. Big Butte, itself, just north of the proposed mining development;
3. All sources of the *Tosawih*i chert and the other medicinal minerals discussed above.

Archaeological studies, including those completed for earlier mining developments in the quarry area, have an impact on traditional religious beliefs. Traditional *Tosawih*i religious practitioners believe the artifacts collected may have religious power in the hands of gifted individuals. They are valued by them as amulets or for use in ceremonies. Those individuals who are not religious specialists also see the artifacts as being of particular value to them as examples of their heritage. They strongly object to their being curated in a fashion which would not permit Western Shoshone people and particularly *Tosawih*i descendants to see them.

As in the case of the *Tosawih*i Quarry area, there is a conflict between the archaeological and scientific significance of artifacts and their religious significance to the *Tosawih*i people.

One of the most serious threats they see from any potential mining development is that it would prevent their access to these objects, if it does not result in their actual destruction.

Finally, any adverse effects that the proposed mining development may have on water and air quality would affect the faunal and floral resources of the area. It has been pointed out that many *Tosawih*i descendants like to hunt in the quarry area, primarily because of their ethnic ties there. Religious leaders deplore these adverse environmental effects because of their strong identification of themselves as stewards for Mother Earth.

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Personal Communications:

Richard Clemmer, Department of Anthropology, University of Denver, Colorado
Discussion by telephone (various dates), April through June, 1991;

Catherine S. Fowler, Anthropology Department, University of Nevada, Reno
Discussions, various dates, April through June, 1991;

Rusco, Elmer R., Emeritus, Political Science Department, University of Nevada, Reno
Discussions, various dates, April through July, 1991;

Steven Crum, Anthropology Department and Applied Behavioral Sciences, University of California, Davis,
Discussion by telephone, March, 1991.

APPENDIX 1:

LIST OF TRIBAL GROUPS AND INDIVIDUALS CONSULTED

James Osborne
Chariman, Cultural Resources
The Shoshone-Bannock Tribe
P.O. Box 306
Ft. Hall, Idaho 83203 (208) 238-3814

Lindsay Manning, Chairman
The Shoshone-Paiute Tribes of the Duck Valley Reservation
P.O. Box 219
Owyhee, Nevada 89832 (702) 757-3211

Larsen Bill *
South Fork Band of the TeMoak Tribe of Western Shoshone Indians
P.O. Box B-13
Lee, Nevada 89829 (702) 744-4273

Frank Temoke, Chief *
Western Shoshone Council of Elders
Star Route
Ruby Valley, Nevada 89833

Harlan Pete, Chairman
Gosute Indian Reservation
P.O. Box 6104
Ibapah, Utah 84034 (801) 234-1136

Glen Holley, Sr., Chair *
Gonnie Mendez, Coordinator
Battle Mountain Band of the TeMoak Tribe of Western Shoshone Indians
35 Mountain View Drive
No. 138-13
Battle Mountain, Nevada 89820 (702) 635-2004

Davis Gonzalez, Chariman
Elizabeth Brady, Vice-Chairman
Elko Band of the TeMoak Tribe of Western Shoshone Indians
P.O. Box 748
Elko, Nevada 89801 (702) 738-8889

David Platerio
Western Shoshone National Council
P.O. Box 68
Duckwater, Nevada 89314 (702) 863-0227

Alta McQueen
Wells Band of the TeMoak Tribe of Western Shoshone Indians
Wells, Nevada (702) 752-3045

Benson Gibsen (sent a copy of the letter to Frank Temoke)
Owyhee, Nevada 89832

Raymond Yowell, Chief
Western Shoshone National Council
Waysack
Lee, Nevada 89829

Heidi Blackeye, Secretary (sent a copy of the letter to R. Yowell)
Western Shoshone National Council
Duckwater, Nevada 89314

Willis Premo, Chair *
Western Shoshone Business Council
Owyhee, Nevada 89832

Whitney McKinney, Tribal Historian *
Chief Judge, Shoshone-Paiute Tribes of the Duck Valley Reservation
P.O. Box 219
Owyhee, Nevada 89832

Hobby Hevewah
P.O. Box 8
Fort Hall, Idaho 83203

Diana Yupe
Star Route Box 238
Pocatello, Idaho 83204

Dave and Avis McKinney
Box 121
Owyhee, Nevada 89832

Ivora Atkins
P.O. Box 382
Owyhee, Nevada 89832

David and Brenda Platerio *
P.O. Box 822
Elko, Nevada 89801

Ralph and Mildred Scissons *
Owyhee, Nevada 89832