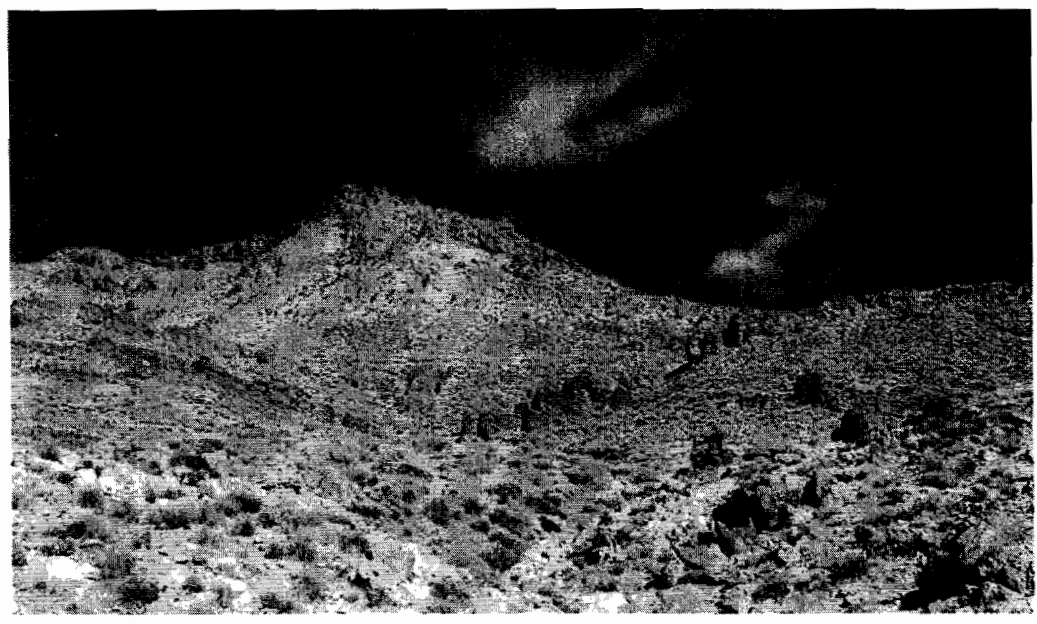


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**AMERICAN INDIAN PERSPECTIVES ON THE
PROPOSED RAIL ALIGNMENT
ENVIRONMENTAL IMPACT STATEMENT
FOR THE U.S. DEPARTMENT OF ENERGY'S
YUCCA MOUNTAIN PROJECT**

AMERICAN INDIAN RESOURCE DOCUMENT



June 2005

Revision 0

**Prepared by
American Indian Writers Subgroup
Consolidated Group of Tribes and Organizations**

Cover Photo:
Courtesy of Calvin Meyers, Moapa Paiute Tribe

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**AMERICAN INDIAN PERSPECTIVES ON THE
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1.0 INTRODUCTION AND OVERVIEW

The American Indian Resource Document (AIRD) is a summary of opinions expressed by the Consolidated Group of Tribes and Organizations (CGTO) regarding the Proposed Rail Alignment - Environmental Impact Statement (EIS) for the U.S. Department of Energy's (DOE), Yucca Mountain Project (YMP) situated within the State of Nevada. The document contains general concerns regarding long-term impacts of the DOE's selection of a rail system to transport High-Level Radioactive Waste and Spent Nuclear Fuel to a geologic repository at Yucca Mountain, Nevada, and a synopsis of specific comments made by the American Indian Writers Subgroup (AIWS) after being afforded the opportunity to travel along much of the area proposed for the rail corridor.

The AIRD was produced in response to an EIS being developed for the proposed rail alignment from Caliente, Nevada to Yucca Mountain and in accordance with DOE Order 1230.2 American Indian Tribal Government Policy. The consultation focused specifically on the proposed rail alignment. However, it should be noted that the CGTO's response to this consultation is not limited to the EIS, but also integrates relevant recommendations and insight made by Indian people throughout their long-term relationship with the DOE and involvement with other federal agencies.

The CGTO has a long history of relationships with the various federal agencies including the YMP. In 1985, the DOE began a long-term relationship concerning the inventory and evaluation of American Indian cultural resources in the YMP area. This program was designed to comply with the American Indian Religious Freedom Act (AIRFA) (42 USC 1996), which specifically reaffirms the First Amendment of the United States Constitution rights of American Indian people to have access to lands and resources essential in the conduct of their traditional religion. These rights are exercised not only on tribal lands but beyond the boundaries of a reservation (Stoffle et al., 1994b).

To reinforce their cultural affiliation and to prevent the loss of ancestral ties to the YMP area, 17 tribes and organizations aligned themselves together to form the CGTO. This group is comprised of officially appointed representatives who are responsible for representing their respective tribal concerns and perspectives. The primary focus of the group has been the protection of cultural resources and environmental restoration. The CGTO has participated in various cultural resource management projects including the YMP (Stoffle 1987; Stoffle and Evans 1988, 1990, 1992, Stoffle et al. 1988a, 1988b, 1989a, 1989b, 1990a, 1990b), the Nevada Test Site (NTS) AIRFA Compliance Program, the Underground Weapons Testing Project (Stoffle et al. 1994b), ongoing consultation in compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) for the NTS Collection (Stoffle et al., 1996a), and the Department of Defense, Nellis Air Force Base Native American Interaction Program.

While this AIRD provides recommendations that target the perceived risks associated with the preservation of American Indian religion, culture, society, and economy, many of the comments presented here focus heavily on cultural resources. This emphasis is the product of continued cultural resource management consultation with the CGTO, which has reinforced Indian peoples' awareness of the wealth of cultural resources that are present throughout southern Nevada. On the other hand, the potential impacts from rail shipments and other associated YMP activities on other essential aspects of Indian life, such as health and socioeconomics, are virtually undocumented. Being a minority group indigenous to the area and sharing in disproportionate impacts and burden from the shipment of high-level radioactive waste and spent nuclear fuel, American Indians believe that their concerns with respect to Environmental Justice have been overlooked. As previously stated by the CGTO, it is their recommendation that these issues be systematically evaluated by the DOE for this project. The opportunity for the CGTO to develop a resource document specific to the proposed rail alignment is considered a highly positive step by the YMP toward eliciting Indian concerns.

The AIRD attempts to evaluate the impacts and effects that the proposed rail alignment may have on cultural resources, tribal economies and most notably the environment. Strategies are also proposed for mitigating adverse impacts to cultural resources resulting from the transportation of spent nuclear fuel and high-level radioactive waste destined for geologic disposal at Yucca Mountain. In the sections that follow this introduction, the document briefly reviews past and present relationships between Indian people and the DOE, and examines impacts of YMP programs and activities on American Indian religion, culture and economy, and summarizes the CGTO's recommendations and concerns regarding the building of the proposed rail alignment and transportation-related issues. In short, the AIRD describes the nature of the relationship between Indian people and the YMP and other federal agencies from an all-encompassing overview to specific discussion about impacts, consequences, mitigation, and management.

The document begins with a summary of formal interactions between the CGTO members and YMP. In the following section, the members of the American Indian Writers Subgroup (AIWS) explain their role in the production of this document and the responsibilities and difficulties they had to confront throughout the writing process.

Next, the Native American perspective section stresses the central role that DOE lands and those along the rail corridor have had in American Indian life from antiquity to contemporary times. Moving from the concept of cultural landscape as a whole to the resources contained in a landscape, this section also examines impacts to cultural resources, Environmental Justice, health, and socioeconomics, which is typically categorized as part of the "affected environment" in the EIS process. This section also includes a brief discussion on political integration as it applies to the YMP.

Mitigation is another integral part of the interaction process with Indian tribes and organizations. In the view of Indian people, the ideal mitigation strategy would be to avoid any action that further disturbs cultural resources along the rail corridor and within the YMP area. However, the CGTO is aware that certain actions must be taken to restore and/or protect YMP lands and its resources while keeping the site safe and clean for future human use. The CGTO recommendations for mitigating adverse consequences of such actions are touched upon in this text.

It is important to note that this document is a supplement to the AIRD produced in 1998 titled *American Indian Perspectives on the Yucca Mountain Site Characterization Project and the Repository Environmental Impact Statement*. Readers are encouraged to utilize the original document and the text that follows herein for a more complete summary of American Indian viewpoints on the YMP and related activities.

1.1 AMERICAN INDIAN INVOLVEMENT ON THE YMP

To reinforce their cultural affiliation rights and to prevent the loss of ancestral ties to the Yucca Mountain area, 16 tribes and organizations who had demonstrated cultural and historic ties to the YMP agreed to participate in 1987 in the original Native American Interaction Program (NAIP). In 1994, these tribes and organizations aligned themselves together to adopt the name of the CGTO. In the same year, the CGTO recommended that the Ely Shoshone Tribe be invited to participate in the NAIP and become a member of the CGTO. This group is formed by officially appointed representatives who are responsible for representing their respective tribal concerns and perspectives. The CGTO has established a long-standing relationship with the YMP. The primary focus of the group has been the protection of cultural resources.

As mentioned earlier, the CGTO has participated in several cultural resource management projects for various federal agencies. These studies are used in this report, along with the collective knowledge of the CGTO, as the basis of the comments in this resource document. The cultural resource management projects sponsored by various federal agencies have been extremely useful for expanding the inventory of American Indian cultural resources beyond the identification of archaeological remains and historic properties. The CGTO consists of the following tribes and official Indian organizations:

- *Southern Paiutes*

- Kaibab Paiute Tribe, Arizona
 - Paiute Indian Tribe of Utah
 - Moapa Band of Paiutes, Nevada
 - Las Vegas Paiute Tribe, Nevada
 - Pahrump Paiute Tribe, Nevada
 - Chemehuevi Indian Tribe, California
 - Colorado River Indian Tribes, Arizona

- *Western Shoshones*

- Duckwater Shoshone Tribe, Nevada
 - Ely Shoshone Tribe, Nevada
 - Yomba Shoshone Tribe, Nevada
 - Timbisha Shoshone Tribe, California/Nevada

- *Owens Valley Paiutes and Shoshones*

- Benton Paiute Tribe, California
 - Bishop Paiute Tribe, California
 - Big Pine Paiute Tribe, California

Lone Pine Paiute Tribe, California
Fort Independence Paiute Tribe, California

- *Other Official Indian Organizations*

Las Vegas Indian Center, Inc., Nevada

1.2 AMERICAN INDIAN WRITERS SUBGROUP

Representing the Western Shoshones:

Maurice Frank-Churchill	Yomba Shoshone Tribe, Nevada
Jerry Charles	Ely Shoshone Tribe, Nevada
Joe Kennedy	Timbisha Shoshone Tribe, California/Nevada

Representing the Owens Valley Paiute/Shoshones:

Gerald Kane	Bishop Paiute Tribe, California
Gaylene Moose	Bishop Paiute Tribe, California

Representing the Southern Paiutes:

Betty Cornelius	Colorado River Indian Tribes, Arizona
Calvin Meyers	Moapa Paiute Tribe, Nevada

Coordinator

Richard Arnold	Pahrump Paiute Indian Tribe and the Las Vegas Indian Center, Nevada
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1.3 FEDERAL GOVERNMENT SPONSORS

U.S. Department of Energy – Office of Repository Development and Office of National Transportation

J. Russell Dyer	Assistant Deputy Director for Technical and Regulatory Programs
Robin Sweeney	Nevada Transportation Manager
Robert Lupton	Tribal Liaison for the Yucca Mountain Project

1.4 AMERICAN INDIAN WRITERS SUBGROUP - SUMMARY OF MEETINGS

1.4.1 Tribal Update Meeting, June 2004

During the June 2004 YMP Tribal Updating Meeting, CGTO representatives met with YMP personnel to receive project updates, discuss the proposed rail alignments from Caliente, Nevada to Yucca Mountain, Nevada, and the development of an EIS specific to the proposed rail alignment. Background information was provided by Dr. J. Russell Dyer, Robin Sweeney, and Robert Lupton about the scoping process, which included 5 statewide meetings. In total, 544 commentors provided more than 4,000 comments. In July 2004, the AGEISS Environmental team was selected to assist the DOE in the development and production of an EIS evaluating the proposed rail alignments for the YMP. To systematically elicit the concerns as part, and in the spirit of DOE's American Indian Policy, the DOE advised the CGTO and members of the AIWS to begin making arrangements for the preparation and production of this resource document. Ultimately, the document would provide an opportunity to collectively present American Indian perspectives and illustrate the long-term commitment of consultation with culturally affiliated tribes and organizations. The reasoning behind requesting the AIWS' participation at this time was attributed to overall budgetary constraints and the final selection of the proposed rail alignments that will be systematically evaluated in the EIS and issued in a formal Record of Decision expected in Calendar Year 2006. Even though the formal scoping process closed on May 24, 2004, Indian people felt compelled to participate in the evaluation process by expressing their concerns through this document. Further, tribal representatives felt it necessary to exercise their sovereign rights so as not to be considered in the grouping of *stakeholders* as is commonly applied to members of the general public.

As part of the meeting, a court reporter was present to record comments from the CGTO. Further discussions took place regarding the preparation of an AIRD outlining Native American viewpoints related to the rail alignment and the transportation of high-level radioactive waste and spent nuclear fuel to the Yucca Mountain area. The intent of this document would be to serve as a reference report to assure the DOE receives a compilation of Native American views and concerns for use in their preparation of the YMP Rail Alignment EIS. As anticipated, the CGTO recommended a subgroup be appointed for this task.

To begin the process, the CGTO recommended that a minimum of two representatives from the Western Shoshone, Owens Valley Paiute and Shoshone, and Southern Paiute groups be appointed to write the American Indian perspective for a resource document. The CGTO recommended that AIWS representatives be provided with an opportunity to travel along the proposed rail corridor, be afforded sufficient funding, technical assistance, and resources necessary to develop a resource document for the YMP Rail Alignment EIS. Richard Arnold, Executive Director of the Las Vegas Indian Center in Las Vegas, Nevada and Spokesperson for the CGTO, would coordinate the activities of the AIWS. The draft text produced by the AIWS was to be reviewed by the participating writers and their tribes prior to submittal.

The YMP accepted this recommendation, offering to compensate the writers for their services and travel expenses, and to provide the AIWS with the necessary technical assistance and resources needed to convey the American Indian perspective in a resource document. The DOE and the AIWS agreed to meet in Las Vegas, Nevada, to initiate the writing tasks that would be supported by Bechtel SAIC Company, LLC (BSC).

1.4.2 First AIWS Meeting, October 2004

The first meeting of the AIWS was held October 21-24, 2004. The AIWS met in Las Vegas on October 21 at the BSC offices in Summerlin. At this time, the AIWS viewed maps of the proposed rail corridor and briefings were conducted by DOE and various BSC personnel about the development of an EIS for the proposed rail corridor. In preparation for this document, the AIWS studied background information about the basic design of the EIS and considered what was necessary to construct and operate a rail line from Caliente, NV to the proposed geologic repository at Yucca Mountain destined to house 70,000 metric tons of spent nuclear fuel and high-level radioactive waste.

On October 22-24, 2004, all but one member of the AIWS participated in a fieldtrip where three full days were spent driving much of the proposed rail corridor route. Becoming familiar with the areas proposed for the rail line proved to be invaluable in the writing of this document, however, the AIWS feels that further cultural resource and ethnographic studies must be performed in order to fully document potential impacts in these areas.

1.4.3 Tribal Update Meeting and Second AIWS Meeting, December 2004

On November 30 and December 1, 2004, the DOE hosted a Tribal Update Meeting providing updates and information pertaining to the Yucca Mountain Project, the Rail Alignment EIS, and the Cultural Resources Management and Native American Interaction Programs. A second meeting of the AIWS was scheduled immediately following the Tribal Update Meeting. AIWS representatives met December 1-3, 2004 to begin to assemble the thoughts and information recorded in this document. During the Tribal Update Meeting the AIWS reported to the CGTO on their participation in the rail corridor fieldtrip and numerous discussions were held in the CGTO Executive Session concerning the collective thoughts of the group to be represented by the AIWS in the preparation of the resource document.

1.4.4 Third AIWS Meeting

A third meeting of the AIWS was held January 11-13, 2005 at the offices of BSC in Las Vegas, Nevada. The goal of this meeting was to incorporate additional and final comments from participating tribes and organizations and to complete unfinished portions of the document.

1.4.5 AIWS Writing Strategy

Based on previous experience in writing text for EISs prepared by other agencies and associated resource documents, the AIWS elected to adopt a similar writing strategy. The AIWS first focused on the development of an outline of writing tasks followed by the production of draft text to be considered for reference and inclusion, as needed, in the YMP Rail Alignment EIS. The AIWS identified three major issues/viewpoints that should be addressed in the EIS. These issues include:

1. American Indians have lived in proposed impact areas and occupied the lands in Southern Nevada since the beginning of time.
2. American Indian culture, economy, religion, and health may be affected by the transportation of high-level nuclear waste and spent fuel to a repository at Yucca Mountain.

3. The cultural significance and interpretation of areas found along the rail corridor will be presented by American Indians through the AIWS resource document and must be taken into consideration by the writers of the EIS.

The AIWS considered several areas in the development of this document that were derived from the comments and recommendations made by the CGTO through the YMP Native American Interaction Program. These recommendations truly became the foundation for this document. Contained throughout the text is the reference to the necessity of American Indian consultation as an essential component to thoroughly evaluating and understanding the dynamics and concerns of Indian people as they relate to the proposed rail corridor. Clearly, dialogue amongst Indian tribes and the DOE is a critical source of information to better understand the impacts of the YMP activities and the proposed rail alignments on important natural and cultural resources.

It is important to note that this document builds upon the information presented in the first AIWS document titled *American Indian Perspectives on the Yucca Mountain Site Characterization Project and the Repository Environmental Impact Statement* prepared for the YMP Repository EIS. The reader should reference the original document for more information.

1.4.6 American Indian Involvement in the EIS Process

The request made by the DOE, in response to recommendations by the CGTO, that the AIWS develop a resource document for consideration during the preparation of the YMP Rail Alignment EIS is a bold step in confirming the government-to-government relationship that exists between the culturally affiliated tribes and organizations. This request was based on the previous involvement of the AIWS in the development of a resource document for the EIS and the development of actual text for the NTS Site-wide EIS. In the writing of this current document, the AIWS hopes to again accurately convey the Indian perspectives pertaining to issues surrounding the development of the proposed rail corridor. However, this document can not possibly be viewed as all-inclusive. The first reference document prepared for the Repository EIS contains detailed information on the experiences of the American Indian people in their involvement with various EIS processes as well as detailed information pertaining to plants, animals, and other resources located throughout Southern and Central Nevada important to the Indian people. All statements and viewpoints represented in the original reference document are accurate and should be taken into consideration by the reader in addition to this document.

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2.0 NATIVE AMERICAN PERSPECTIVES

2.1 CENTRALITY ISSUE

For many centuries the YMP study area and the proposed rail corridor lands have been important to the lives of American Indians. These lands contain traditional gathering, ceremonial, and recreational areas for Indian people. From antiquity to contemporary times, this area has been used continuously by many tribes. It contains numerous ceremonial resources and power places that are crucial for the continuation of American Indian culture, religion, and society. Until the mid-1900s, traditional festivals involving religious and secular activities attracted Indian people to the area from as far away as San Bernardino, California. Similarly, groups came to the area from a broad region during the hunting season and used animal and plant resources that were crucial for their survival and cultural practices.

Many non-Indian people hold a different view of these lands. For example, the federal government has maintained the perception that the YMP is located in a remote area with a very low population density and other characteristics that make it ideal for the siting of a potential repository to be accessed by a newly constructed rail system. Because of this “wasteland perception,” YMP lands were withdrawn by the federal government for the Atomic Energy Commission’s nuclear testing site. The federal agency was renamed the DOE who named the land the NTS; a portion of the land was later designated for the YMP and the potential repository site.

Despite the loss of some traditional lands to destruction and reduced access, Indian people have neither lost their ancestral ties to, nor have forgotten the abundant cultural resources in the YMP area, or along the proposed rail corridor. Indian people have cared for the resources in these areas and will continue to do so. These strong beliefs and the presence of resources confirm the continuity in the American Indian use of and broad cultural ties to the YMP and the proposed rail alignment area.

Indian people believe that the proposed rail alignment falls within a cultural landscape and corresponding viewshed that extends many miles in all directions. Because this land is a part and not the whole, it is essential that determinations of cultural affiliation, ancestral ties, and impacts from YMP actions and programs on traditional Indian culture, religion, and society be made according to the broad regional use of lands linked around Yucca Mountain.

The extensive information compiled through long-term research involving the CGTO demonstrates that American Indian cultural resources are not limited to archaeological or historical remains of native ancestors, but include all natural resources, as well as geological formations contained throughout the region. Natural resources constitute critical components of American Indian daily life and religious beliefs. Plants and animals are a source of food, raw materials, and medicine. Ritual practices cannot be properly carried out without plants and animals. Similarly, natural landforms mark locations that are significant for keeping the historic memory of American Indian people alive and for teaching children about their culture and history.

This land and its resources are well-known by American Indian people, who consider the YMP and the proposed rail corridor areas as central parts of their cultural landscape. This knowledge has allowed them to be self-sufficient and to transfer all their cultural values and practices to future generations to this day.

2.2 AMERICAN INDIAN CULTURAL RESOURCES

2.2.1 Yucca Mountain Study Area

Previously, it has been stated that the CGTO knows, based upon its collective knowledge of Indian culture and past American Indian studies, that American Indian people view cultural resources as being interconnected. Thus, certain systematic studies of a variety of American Indian cultural resources must be conducted before the cultural significance of a place, area, or region can be fully assessed. Although the NAIP has been in existence for some time, expanded efforts should be made to conduct specific studies about the cultural importance of the YMP area and nearby lands. In some portions of the YMP, a number of studies have been conducted with little or no American Indian involvement, while other studies have not yet begun. Future studies could benefit from American Indian involvement.

Before Indian people can fully assess the cultural significance of a place and its associated natural and cultural resources, all studies must be completed and the tribal governments and organizations must have had the opportunity to review the recorded thoughts of its elders to determine their support of these conclusions. Typically, American Indian studies focus on one topic at a time so that tribes and organizations can send experts in the subject being assessed. The following is a list of studies that are required for a complete American Indian assessment:

1. Ethnoarchaeology - the interpretation of the physical artifacts produced by our Indian ancestors
2. Ethnobotany - the identification and interpretation of the plants used by Indian people
3. Ethnozoology - the identification and interpretation of the animals used by Indian people
4. Rock art - the identification and interpretation of traditional Indian paintings and rock peckings
5. Traditional Cultural Properties (TCPs) - the identification and interpretation of places of central cultural importance to a people often referred to as "power places" by Indian people.
6. Ethnogeography - the identification and interpretation of soil, rocks, water, and air
7. Cultural Landscapes - the identification and interpretation of spatial units that are culturally and geographically unique areas for American Indian people.

When all of these subjects have been studied, then it will be possible for American Indian people to assess three critical issues: (1) the natural condition of the rail corridor portion of Native American traditional lands, (2) changes due to YMP activities, and (3) impacts of either furthering changes in the natural environment or restoring traditional lands to natural conditions. Indian people believe that the natural state of their traditional lands was what existed before

European contact, when Indian people were fully responsible for the continued use and management of these lands.

The YMP and nearby lands were central to the Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone people. The lands were central in the lives of these people and were mutually shared for religious ceremony, resource use, and social events (Stoffle et al., 1990a and b). When Europeans encroached on these lands, the numbers of Indian people, their relations with one another, and the condition of their traditional lands began to change. European diseases killed many Indian people. European animals were introduced and disrupted fields of natural plants. Europeans were guided to and then assumed control over Indian minerals and Europeans siezed Indian agricultural areas.

The withdrawal of Nevada's lands for military purposes in the 1940s, followed by use by the DOE, which included the Yucca Mountain area, continued the process of Euroamerican encroachment on Indian lands. Land-disturbing activities followed, thus causing some places to become unusable again for Indian people. On the other hand, many places were protected by this land withdrawal because "pothunters" were kept from stealing artifacts from rock shelters and European animals were kept from grazing on Indian plants. The forced removal of Indian people from the YMP area was combined with their involuntary registration and removal to distant reservations in the early 1940s. Indian people were thus removed from lands that had been central in their lives for thousands of years.

Despite the disturbance and destruction of some cultural resources and the physical separation from the site characterization activities and neighboring lands, Indian people continue to value and recognize the central role of these lands in their continued survival. Recognizing this continuity in traditional ties between the Yucca Mountain area and Indian people, the DOE in 1987 began its first long-term NAIP involving the inventory and evaluation of American Indian cultural resources in the area. This research was designed to comply with various federal laws and Executive Orders including AIRFA, NAGPRA, and Executive Order 13007, *Indian Sacred Sites*. Throughout their involvement, the CGTO has continuously made recommendations to the DOE/YMP to assist in the design, implementation, and protection of cultural resources on and near the YMP.

2.2.2 Plants and Animals

To date, the CGTO's involvement has supported in-depth studies of 107 plants and more than 20 animals that are present at Yucca Mountain and other nearby locations on the NTS and Air Force training lands. Indian elders as part of their traditional resources identified these plants and animals. Detailed information on these plants and animals is recorded in the Repository EIS resource document prepared by the AIWS. It is believed that these resources will be affected by YMP-related activities which are within an area roughly bounded and known from various sources to have been used by Western Shoshone, Southern Paiutes, and Owens Valley Paiutes and Shoshones.

Many of the plants identified as traditional use plants are derived from early American Indian interpretations of and concerns for plant resources on or near Yucca Mountain or at other locations throughout Nevada. Representatives of the 17 involved Indian tribes and organizations identified and interpreted plant resources as part of a consultation relationship between themselves and the DOE. Participants in the ethnobotany studies included botanists who were associated with the YMP and knowledgeable Indian plant experts. It is important to note that

although the tables and appendices contained in the first AIWS resource document are fairly comprehensive, they do not represent all of the traditionally known and used plants along the rail alignment. Experience has shown that in many instances Indian people will intentionally omit or "not remember" resources which may be threatened or considered sacred. It is equally important to remember that although the fauna found in the surrounding areas may appear to be similar, Indian people are of the opinion that they may in fact be viewed as vastly different. The CGTO believes that it is important to thoroughly assess the area before considering or responding to any proposed activities.

2.2.3 Biological Resources

Indian people believe that the Yucca Mountain and rail corridor areas are home to many important species of mammals. Previous studies conducted for the YMP and on the NTS indicate that as many as 46 species of mammals may be found in the vicinity. Additionally, 35 species of birds were recorded in 1982 at Yucca Mountain (O'Farrell and Collins, 1983), and 98 species have been observed in the same area as of 1996. Indian people are aware of these different species found in the Yucca Mountain area and along the proposed rail alignment which play an integral part of traditional stories and cultural beliefs. To date, several studies have been conducted by the DOE to record and monitor animals, birds, and reptiles located in the YMP area. However, no systematic studies have been conducted by the DOE to ascertain the cultural significance to the Western Shoshone, the Southern Paiute, and Owens Valley Paiute and Shoshone people as it relates to the rail corridor.

2.2.4 Water Resources

The CGTO is concerned about all water sources located along the proposed rail alignment. Surface water exists in areas along the rail alignment and is found at springs, seeps, the Amargosa River, and in *Pohs*, or tinajas, which are important basins used to store water for everyday or ceremonial use. According to traditional stories and cultural beliefs, although the water table is found below the surface of Yucca Mountain, all of the water systems are interconnected with many of the sources associated with the Amargosa Valley, Ash Meadows, and the Death Valley area. Previously, the DOE conducted numerous studies to inventory the water resources in the YMP area without systematically assessing the cultural concerns of Indian people. With the evaluation of the rail alignment, consideration must be given to the cultural importance of water and to the important nearby medicinal plants or animal habitats which were used historically and are needed by Indian people today. Other locations, known as hydrological areas, contain a wide range of important cultural resources including plants, animals, archaeological sites, minerals, and TCPs, such as power places, sacred sites, and intellectual properties. Indian people believe that water sources, including those along the rail corridor, are the homes of *water babies* (*supernatural beings*), who live in the area and protect the springs and water resources. No studies have been conducted to ascertain the importance and understanding of this cultural phenomenon. The water in which they live is part of the cultural landscape and ecosystem associated with other important features. To better understand the impacts to water resources, the DOE should expand their studies to respond to the water-related concerns of Indian people.

2.2.5 Cultural Resources

American Indians believe that they have the responsibility to protect with care, and teach the young, the relationship of the existence of a non-destructive life on Mother Earth. This belief is the foundation of our holistic view of cultural resources, i.e. water, animals, plants, air, geology, sacred sites, TCPs, and artifacts. Everything is considered to be interrelated and dependent on each other to sustain existence. Indian people believe that through proper respect and understanding, this complex relationship can be better understood and allow for existing and future generations to be better prepared for the care of these things.

Conversely, it is common archaeological practice to look at areas as distinct sites. Thus, a rock shelter, a camping area, or a spring surrounded by broken pottery can be located within a few hundred yards or farther from one another and be assigned three different site numbers. When Indian people are asked to interpret the separate elements of a site, they consider that additional areas may be interrelated and therefore, would prefer to define them as a single unit. On other occasions, metal objects or other historical artifacts that are found by archaeologists are identified as being items used exclusively by Euroamericans without any regard or consideration to use or adaptation by Indian people. Needless to say, these diverging perspectives are usually difficult to understand from the cultural perspective and harder to incorporate from an archaeological or other scientific point-of-view.

Typically, Indian people assign meaning to places that are involved with (1) their creation as a people, (2) religious stories, (3) burials, and (4) significant secular events. Indian people believe that they have inhabited their traditional homelands since the beginning of time and had very complex belief systems and values. Archaeologists, on the other hand, believe that scientific evidence supports the notion that Indian people were highly mobile groups of aboriginal hunter-gatherers who occupied the Yucca Mountain area and were followed by Euroamericans who used the area for purposes of travel and transportation, prospecting, surveying, and possibly ranching. This opinion appears to portray Indian people as roaming aimlessly across the desert without consideration to the early historic accounts of Indian farming activities prior to European contact and active participation in travel, transportation, prospecting, surveying, and ranching.

Other sites including the Yucca Mountain area and the proposed rail corridor areas are identified in the traditional stories of the Southern Paiutes, Western Shoshone, and the Owens Valley Paiute and Shoshone people. The lack of abundant artifacts and archaeological remains in an area does not infer that a site was not used historically or presently, and considered as an integral part of the cultural ecosystem and landscape. The CGTO knows with expanded American Indian cultural resource studies, a better understanding would be gained.

2.2.6 Environmental Restoration/Management

The CGTO has expressed their continued interest and involvement in entering into cooperative agreements with the DOE to co-manage the resources in and around the YMP study area including the proposed rail alignment. This is particularly appropriate when considering revegetation, monitoring of cultural resource sites, reclamation of archaeological sites, and systematic involvement in the interpretation and understanding of cultural resources located within the areas affected by YMP activities. Other ethnographic studies in the areas of geology, zoology, biology, hydrology, meteorology and volcanology should be conducted to understand the complex cultural perspectives of Indian people.

Any future management decisions regarding these resources must take into account the concerns of the Indian people. Should an area fall within a TCP or sacred site, potential access to the area could be requested under Executive Order 13007, *Indian Sacred Sites* and in the spirit of AIRFA. In order to ascertain the importance of an area, a systematic study should be designed and implemented to gain further insight about the cultural significance. The YMP should incorporate ethnographers who are familiar with working with Indian people, especially Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone. Prior to implementation however, a representative sample of these sites should be visited by a subgroup appointed by the CGTO.

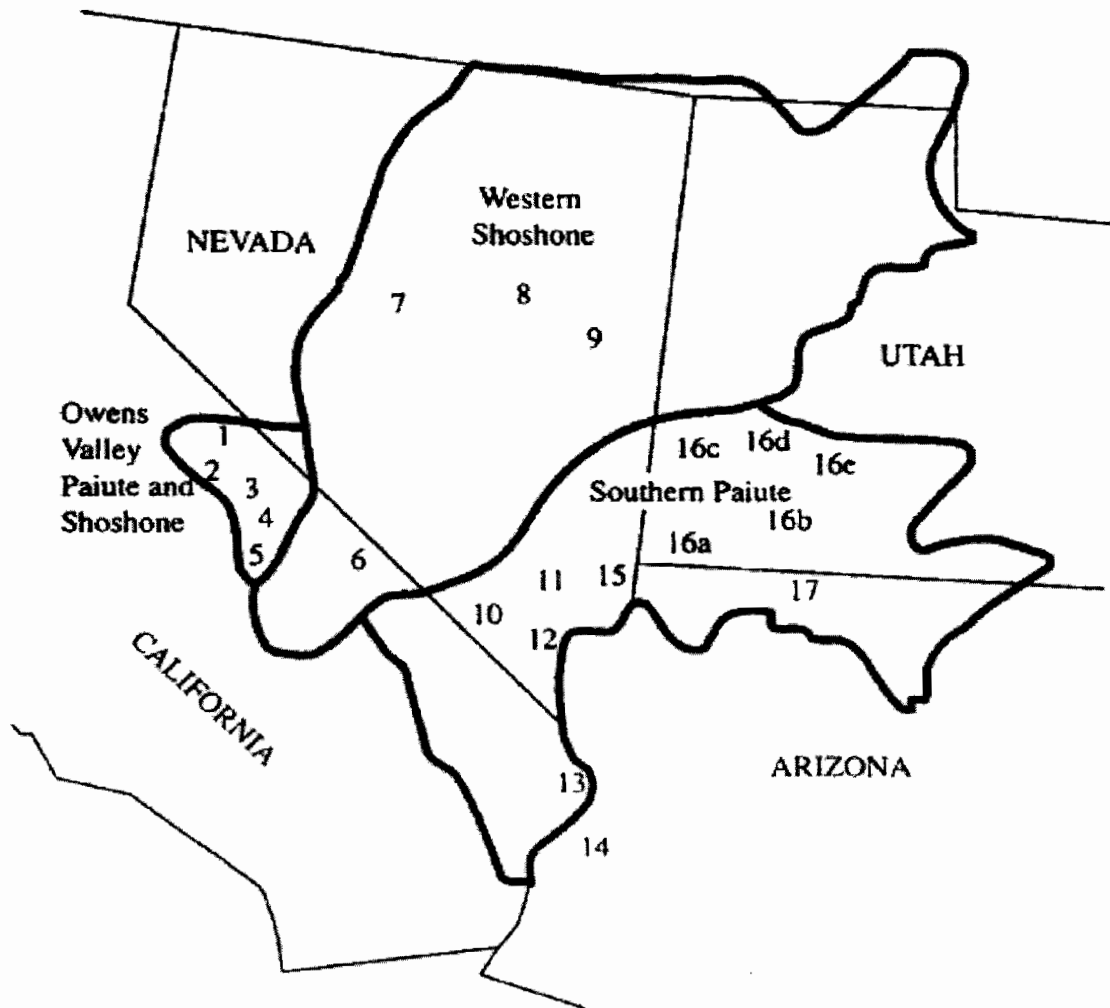
The CGTO knows that the actions considered by the YMP potentially will affect American Indian cultural resources within an area roughly bounded by the traditional homelands of the Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshones. The YMP proposed rail corridor activities would adversely affect cultural resources within the American Indian region of influence due to the cultural centrality of these lands to all three ethnic groups (Figure 1). Within this designated area, specific actions will have direct local impacts. Ultimately, however, any action that moves an area away from or back towards its natural state impacts all Indian people.

Some of the important animals in the region include bighorn sheep, pronghorn antelope, rabbit, turtle, coyote, chuckwalla, and the whiptail lizard, which was used for food, ceremony and eye surgery. No systematic American Indian studies of animals and archaeology have been conducted for the proposed rail corridor and; therefore, a complete assessment of the cultural significance of this area is not possible at this time. Other locations known as hydrological areas contain a wide range of important cultural resources, including plants, animals, archaeological sites, minerals, and TCPs such as power places, sacred sites, and intellectual properties.

Ethnoarchaeological studies such as those conducted as part of the DOE's YMP help federal agencies understand the complex relationship Indian people have with lands and resources under federal jurisdictions. Many times federal agencies may have a vested interest in certain acreage for concurrent programs or activities. These divisions cause artificial boundaries often misunderstood by Indian people, making it difficult to interact. Nevertheless, due to the cultural interconnectedness, numerous archaeological resources in this area, dating as early as Clovis (10,000 years ago), have been identified. Equally important are the presence of important minerals, which were extracted by Indian people to make tools, stone artifacts, and various ceremonial objects. Traditional quarry sites and associated localities are believed to be places of power and locations for traditional healing ceremonies.

2.3 SITE DESCRIPTIONS

2.3.1 Crater Flat is a significant area well-known by the CGTO that carries a wide range of important cultural resources. Crater Flat is located on the west side of Yucca Mountain and is the final stretch of the east to west portion of the proposed rail alignment. This area was identified by tribal representatives as a sensitive area during the early YMP studies. The land description pertains to an alluvial fan with three cinder cones, vegetation consisting of annual grasses, creosote, and cacti along with animal sources consisting of tortoise, rabbit, coyote, lizards and birds. Indian people believe that cinder cones and other geologic features associated



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| 1. Benton Paiute Indian Tribe | 12. Las Vegas Indian Center |
| 2. Bishop Paiute Indian Tribe | 13. Chemehuevi Indian Tribe |
| 3. Big Pine Paiute Tribe of the Owens Valley | 14. Colorado River Indian Tribes |
| 4. Fort Independence Indian Tribe | 15. Moapa Paiute Indian Tribe |
| 5. Lone Pine Paiute/Shoshone Tribe | 16a. Shivwits Paiute Tribe—Utah |
| 6. Timbisha Shoshone Tribe | 16b. Cedar City Paiute Tribe—Utah |
| 7. Yomba Shoshone Tribe | 16c. Indian Peaks Paiute Tribe—Utah |
| 8. Duckwater Shoshone Tribe | 16d. Kanosh Paiute Tribe—Utah |
| 9. Ely Shoshone Tribe | 16e. Koosharem Paiute Tribe—Utah |
| 10. Pahrump Paiute Tribe | 17. Kaibab Paiute Band of Southern Paiutes |
| 11. Las Vegas Paiute Indian Colony | |

Figure 1. Traditional ethnic boundaries and locations of tribes in the Yucca Mountain region.

with volcanic activity are used as landmarks and moreover, believed to be places of power and importance to Indian people. Indian people believe that all volcanoes and cinder cones are interconnected. As such, the National Nuclear Security Administration will be evaluating the cultural significance of Scrugham Peak on the NTS. Since the area is easily recognizable, Crater Flat was used as a major travel route by the Southern Paiute people to Oasis Valley from Amargosa Valley, Pahrump, Ash Meadows, and Indian Springs. This route was used until as recently as the 1940s. Additionally, Tarantula Wash, located on the west side of Crater Flat, has a great deal of rice grass that was collected by Indian people who used controlled burning methods to increase harvests. This plant is still used by Indian people today and must be protected. Any activity that disturbs the natural balance will cause problems for future generations. These areas must be systematically evaluated to further document their cultural significance. Any activities that would further disturb these areas or result in limited access would not be supported by the CGTO.

2.3.2 Black Cone Site (*Crater Flat Area*) was visited by Indian people and ethnographers during some of the early fieldwork associated with the YMP. The Black Cone was identified and considered a place of religious significance. Places such as this are considered sacred sites by Indian people where ceremonial activities would occur or offerings would be left. The cinder cones are considered to be entries to the world below and must be protected. Even though the site was previously identified by Indian people, to date no systematic studies have been conducted to determine the level of significance or importance of this area. Any activities which would further disturb these areas or result in limited access would not be supported by the CGTO.

2.3.3 Bare Mountain is believed by Indian people to be related to the mountains near and around the YMP study area. Due to necessary site characterization studies, archaeological surveys and data recovery efforts were conducted in the Bare Mountain area by the Desert Research Institute. Specie Spring is located in this area and has been visited repeatedly by Indian people. The spring provides a source of water for many important plants and animals, which are the basis of many traditional stories. Although this area falls outside of Yucca Mountain proper and the areas of the proposed rail alignment, the CGTO would recommend that no further ground-disturbing activities occur or be considered for this area.

2.3.4 Fortymile Canyon is well-known amongst Indian people who continue to use either its traditional Shoshone name *Dogowya Hunumpi* (Snake Wash) or the Owens Valley name *Towahonupi* (Snake Canyon) to describe it. The canyon was a significant crossroad where numerous traditional Indian trails from distant places like Owens Valley, Death Valley, and the Avawatz Mountains came together (Stoffle et al., 1989a). While many American Indian studies have been conducted in this area, certain cultural resources have not been systematically studied. Other needed studies include rock art (which is called in Southern Paiute *tumpituxwinap* or literally “storied rocks”) (Stoffle et al., 1995), power places, and animals.

2.3.5 Beatty Wash is a familiar area to the CGTO. The ecosystem is known through the use of trail systems, procurement of plants and animals, and is described in numerous songs and stories. This knowledge comes from frequent visits by Indian people to this area. Plants observed in the area included Indian Spinach, Bud Sage, Greasewood, and Desert Trumpet. These plants are used for foods and medicines and must be protected. Any activity that causes harm to the natural balance will cause harm to the environment.

Within the wash are abundant resources including petroglyphs and historic mining camps that are eligible for nomination to the National Register of Historic Places. Tribal representatives noted several cracks in the rock formation containing the petroglyphs causing great concerns for its structural integrity. A detailed study should be conducted to determine if vibration from construction and rail activities might cause harm to the petroglyphs. The proposed project will cause an adverse impact to the viewshed and visual and cultural aesthetics. Secondly, due to the cultural significance of the petroglyphs to Indian people, a systematic ethnographic study must be conducted prior to construction activities. Thirdly, and most importantly, a traditional blessing of the land must be conducted to protect the land and maintain harmony. The YMP should support the blessing ceremony and in the event the location is selected, Indian monitors should be present to insure that no damage occurs as a result of construction activities.

The expansive viewshed that is defined as the interconnected panorama that encompasses all geologic landforms, springs, horizons, water resources, the sky, and story and songscapes will be dramatically disturbed through the construction of a proposed bridge for the rail line. The CGTO is aware of the Amargosa River and its tributaries that helped form the Beatty Wash. Disturbance to the land and its resources, including impacts from construction activities, will cause irreparable damage that should be systematically and culturally mitigated. To date, there have been no systematic ethnographic studies in the Beatty Wash area, therefore, an assessment of its importance cannot be fully understood until such time as an ethnographic overview is completed.

2.3.6 Oasis Valley is known as an important hydrologic area that is a part of the agricultural core area of a much larger Indian district called *Ogwe'pi* by the Indian people who used the area for farming, gathering, and medicine activities. The cultural significance of the *Ogwe'pi* District is well established by document research (Stoffle et al., 1988b), one plant area study, one archaeological study area (Stoffle et al., 1994a), and by interviews conducted during the 1930s. According to Indian people interviewed in the 1930s (Steward, 1938), the *Ogwe'pi* District contained agricultural lands next to springs and streams in Oasis Valley itself, while the uplands formed by nearby mountains contributed pine nuts and deer to the diet of the Indian people (Stoffle et al., 1990b). The *Ogwe'pi* District was an important place for Indian trade and ceremonialism. Mineral hot springs were used by Indian people for curing, thus further increasing the cultural importance of the Oasis Valley core area. During much of the historic period, Indian people continued to live in Oasis Valley and use the surrounding uplands of the *Ogwe'pi* District. Indian people believe the wetlands, streams, and rivers found in the Oasis Valley hold special reverence and are the homes of supernatural beings that protect them. These resources are considered important and irreplaceable sacred areas that must be protected. To do otherwise will disturb the natural balance of the world and cause harm to future generations. The proposed YMP rail corridor alignment will clearly interfere with these important connections. Much of the Oasis Valley hydrological basin has not been systematically studied by American Indian people. Accordingly, it is essential to conduct systematic ethnographic studies to insure proper evaluation and understanding. Therefore, at this time, it is not possible to fully assess the cultural significance of all places in the Oasis Valley.

2.3.7 Prow Pass, just north of Yucca Mountain, is recognized as an important ceremonial site that was the focal point of many cultural activities. In some of the early ethnographic studies conducted as part of the YMP, many of the Indian people suggested that the area may contain burials. This information was based on the placement and formation of various types of rocks. Also associated with the Prow Pass area is a ceremonially placed pestle, a nearby rock shelter that contains pictographs and numerous other important cultural resources. Many medicinal and

food plants were harvested in the area because of its associated power and religious significance. This area is situated near the entrance of Oasis Valley, which was described in some of the early works of Julian Steward in the 1930s. The CGTO has recommended that Prow Pass be placed off limits to non-Indian people and other site characterization activities associated with the YMP.

2.3.8 Busted Butte contains the only known isolated petroglyph in the area that was identified during early archaeological surveys and most recently described in a comprehensive Rock Art Study conducted in cooperation with the DOE's NAIP for the NTS. According to the study, Indian people indicated that this petroglyph is related to other ones found in lower and upper Fortymile canyon as is true with other resources found in the area. Typically, petroglyphs are found in larger groupings, thus making this particular site culturally and archaeologically unique. Tribal representatives from the CGTO have visited the site and have recommended that it be protected and that provisions for continued access be afforded to Indian people on an as needed basis. Due to the potential impacts from the siting of the proposed rail system, a systematic ethnographic study must be conducted to fully understand the adverse affects and the development of appropriate mitigative measures.

2.3.9 Beatty Cattle Company Ranch – This area (previously known as Coffey's Ranch) is known and was used by Indian people from the Beatty, Death Valley, Ash Meadows, Pahrump, and Oasis Valley areas as evidenced by the extensive lithic scatters and personal knowledge of Indian people. This area is known for its abundant water and has an extensive variety of plants and animals. Both Southern Paiute and Western Shoshone people are familiar with the botanical resources that are found in the area. Anthropologist Julian Steward confirmed the traditional knowledge and spoke about Indian people living in the area in the 1930s. In 2004, some members of the AIWS visited the area and it was noted that the area contained many important cultural resources including lithics, diverse flora and fauna, water resources, and other important elements that produce a significant cultural landscape. Recent ethnographic and archaeological studies to the north at Black Mountain on the Nevada Test and Training Range have identified an active hydrologic system that provides much of the moisture and water to the valley below. Indian people have explained and later confirmed that Upper Thirsty Canyon to the north connects to the lower elevations and is considered the headwaters of the Amargosa River that leads to the Oasis Valley. Indian people describe such wetlands, streams, rivers and seeps as holding special meaning and sacredness. The area is also believed to have rock alignments (geoglyphs) that must be studied before any activities occur. Until such time as systematic ethnographic studies are completed, the CGTO cannot provide more detailed information regarding the area or impacts associated with the proposed activities. Prior to any disturbance to this area, the YMP should support a traditional blessing ceremony.

2.3.10 Scotty's Junction – The CGTO knows that the Scotty's Junction Timbisha Trust Lands hold cultural resources and economic benefits currently under consideration by the Timbisha Shoshone of the Western Shoshone Nation. Continued trust responsibility and sovereignty shall be recognized. The Ruby Valley Treaty of 1863 identifies Western Shoshone claims and identifies corresponding boundaries and ties to the land. Subsequent health risk studies and the associated risk management findings conducted by the Native Community Action Council in 2000 cite information that should be incorporated into the EIS and used in further mitigation and discussions with the Timbisha Shoshone. (See the Ruby Valley Treaty of 1863 and the Native Community Action Council Report) In 2000, the Timbisha Shoshone Tribe received nearly 7,000 acres of Trust Land including an area near Scotty's Junction that is being evaluated for future development by the Tribe. Construction of the proposed rail alignment near the Timbisha Shoshone Trust Land may directly or indirectly impact tribal initiatives. Before any construction

or consideration is given to the siting of the rail alignment, the DOE must consider the implications to the Tribe's economic development and preservation strategies for the area. In the event the Tribe selects a form of light industry that may benefit from the construction of a rail spur, the DOE should enter into negotiations with the tribe to construct a spur to allow for the safe and efficient shipping of products to the DOE NTS and to support Air Force activities.

2.3.11 Goldfield – Goldfield, Nevada is being considered for a possible portion of the YMP rail alignment. The rail alignment will head south then west of the town where a silica deposit mine would possibly benefit from shared use of the rail line. The town of Goldfield believes that this would provide an economic stimulus for the town. To the north of Goldfield, a rail maintenance yard is being considered.

The CGTO knows that Indian people have occupied the lands around Goldfield and worked in the mines throughout the region. Julian Steward documented Indian families living in the area in the 1930s. During these times, Indian people were not allowed to live in town and were required to establish various Indian camps on the outskirts of town in the areas where the rail corridor is proposed. Preceding this time, Indian doctoring ceremonies among the Southern Paiutes and Western Shoshone were conducted on the playas and in nearby canyons. Their presence is further documented in early census and military records. Several rockshelters have also been identified that contain archaeological evidence that substantiates Indian occupation.

Most recently, the Native Community Action Council conducted interviews with Indian people with ties to this area. According to Indian histories, many burials are known to exist in the area in undisclosed locations. An Indian woman named Indian Molly was buried in approximately 1908 in a so-called *Pauper's Cemetery*. It is also believed that Indian gardens were located nearby that provided food for many local miners and community members. The Timbisha Trust Lands will be adversely impacted by the construction of the proposed rail line raising a question of Environmental Justice violations and conflicts with the Ruby Valley Treaty of 1863. Due to the cultural significance of the area an ethnographic study must be initiated along with a blessing ceremony to maintain the cultural balance of the area. Indian monitors must be present during evaluation and construction activities.

2.3.12 World War II Military Target Area – The World War II target area in the Ralston Valley is a historic saga. During World War II, this area was used as a practice range for military pilots. There are numerous known military and small commercial aircraft crash sites in this area and nearby Mud Lake. A local historian has accumulated information from this era and has become an expert on knowing and identifying the remains of aircraft lying scattered over a wide area of the Ralston Valley. He was instrumental in keeping the stories and history of the area factual. He is in the process of placing identifying memorial markers at many of these sites. He continues to carry on the history of the area with exhibits and information in the local museum. The actual historic aircraft hanger at the old airfield is listed on the National Register of Historic Places, but the listing of the surrounding practice range is still on hold. The museum director is hopeful that someday the remaining lands will also be protected. It is reported that as many as 100 plane crashes have occurred in this area resulting in the deaths of numerous individuals. The AIWS believes this area to contain human remains and therefore, considers it to be a location of many burials. The CGTO asserts that this place should be preserved to commemorate the historic significance of the area and honor those who gave their lives for their country. The CGTO supports the efforts to nominate this site to the National Register of Historic Places.

2.3.13 Mud Lake (Lowe) Archaeological Site – This area may be adversely impacted from an alternative siting of the proposed rail corridor. The CGTO knows that this area contains important cultural resources including plants, artifacts, and power places. The geographic features are unusual, consisting of a low-lying rocky range facing east overlooking a vast plain. Mud Lake lies at the southwestern edge of Ralston Valley and is just off the northern edge of the Nevada Test and Training Range complex. Archaeological evidence suggests the site was used 3,000 years ago at a minimum. The visual aesthetics are grand and the natural landforms are ideal for a cultural landscape. The site visit revealed lithic tools, obsidian and chert projectile points, two petroglyph panels, rock shelters, poha (rock basins), healthy looking food and medicinal plants, animal scats, and birds. While visited by the AIWS, it was noted that the site was previously recorded but not properly reclaimed by today’s archaeological reclamation standards. This location is considered to be culturally significant and therefore, a smudging ceremony (a traditional ceremonial practice using Native plants to protect the people and the environment) was conducted by the AIWS. Due to large amounts of precipitation, water was readily available and contributed to many of the elements that are conducive to those found at vision quest sites and ceremonial areas, further evidenced by its geographic features including the proximity to Mud Lake and the panoramic viewscape of the surrounding mountains.

Indian people have expressed additional concerns about these water sources being the home of “water babies” (supernatural beings) that protect the water and the area from impending harm if not properly respected. Indian people also noted that this location is aligned with several significant sites and situated along a natural travel route used by Indian people. The area was recognized as being isolated, providing an excellent refuge from unexpected raids and general encroachment. In the 1990s, ethnographic studies were conducted by the University of Arizona under contract with the NTS to evaluate former DOE activities to the north at Hot Creek and to the south at the Double Tracks nuclear testing location. Although no specific activities were conducted at this site, Indian people still recognize the cultural connection between these areas. The CGTO requests the opportunity to conduct ethnographic studies to fully understand the cultural significance of the area. Until further evaluations are conducted, it is difficult to fully assess the cultural significance or implications of the rail alignment to this area. If the site is impacted, YMP should conduct an inventory of items removed during previous excavations. Also, Indian monitors should be present during all phases of evaluation and construction with a traditional blessing ceremony being conducted prior to any ground-disturbing activities.

2.3.14 Stone Cabin Valley/Warm Springs Summit/Reveille Valley – This area contains an abundance of Indian history including stories by the Ely Shoshone people. When lacking adequate food supplies in their traditional region, Indian people would ask permission from Chief Kawich to gather food throughout the Kawich Range. According to traditional knowledge, the person designated to request permission from the tribal leader must paint his face red, using red ochre, and would respectfully approach the tribal leader unarmed. Once permission was granted, the Ely Shoshone people would gain access to the area to supplement their diet. Of particular importance was the picking of pinenuts. This practice of obtaining permission to enter areas outside of one’s traditional homelands was commonly observed and is still practiced today. The CGTO knows this area is abundant in cultural resources important to Indian culture, religion, and society. Currently, this land is under the jurisdiction of the Battle Mountain District of the Bureau of Land Management (BLM) who issues grazing permits to farmers who run cattle in the valleys and mountain range to the north.

According to the Western Shoshone, the area holds additional significance as it is known to be the homeland of D. Brigham also known as *Don-a-qui*, a traditional singer recognized for his

ability to sing for a period of five consecutive nights at large fandangos that were attended by Indian people from surrounding communities. *Don-a-qui* was renowned for not singing the same song twice during any such occasion. These gatherings included dances and festive social events including the meeting of tribal leaders who needed to make important decisions on behalf of their people. The area was recognized as the traditional homeland of numerous Indian families that currently live on the Duckwater Indian Reservation; in the town of Fallon, Nevada; and in nearby surrounding areas.

Clifford Mine, located just southwest of Warm Springs Summit, was identified as a historic mine operation that should be preserved and recommended for nomination to the National Register of Historic Places. As with most mining activities, Indian people were used as laborers to assist in excavation activities and probably were involved either directly or indirectly.

The Warm Springs area is still used by Indian people today. Historically, Indian people came to this area to purify themselves and go to a nearby school. Today, members of the Western Shoshone National Council frequent this location during their annual Spiritual Run to Yucca Mountain and the Nevada Test Site. This area is highly revered by the Indian people for its healing power. Tribal representatives are aware of an Indian burial that was removed from this area and believe that the likelihood of other burials here is high. Today, Indian people describe the small communities in the area where family members are buried nearby. Tribal representatives having direct family ties to the area have unpublished knowledge of this location. Although American Indian ethnographic studies occurred to the north at Hot Creek, none have been conducted in this vicinity. During the visit in 2004, Indian people observed a variety of vegetation including juniper, sage, rabbitbrush, oak, and grasses. A rock shelter facing south was considered ideal to capture heat from the sun. Ceremonies, hunting, and visiting with other northern tribal groups are believed to have taken place at this location. Conversely, it should be noted that the area is also not completely visible to the valley below making it suitable to take shelter from raids and encroachment. Vision quests and pinenut harvesting were important to sustain the Indian people during the fall activities. There have been discussions among tribal representatives to nominate this location as a TCP. Due to the cultural sensitivity associated with this area, the YMP should attempt to relocate the rail corridor to avoid this location and minimize impacts.

At this time it is not possible to make a full cultural assessment of this hydrological area due to study limitations being restricted to the southernmost portion of the Kawich Mountains. The CGTO recommends that additional ethnographic studies be conducted to thoroughly evaluate the cultural landscape and related studies be conducted by the AIWS to assess TCPs. Prior to the commencement of any ground-disturbing activities, the YMP should support a traditional healing ceremony to restore its natural balance. Additionally, the YMP should support on-site Indian monitors during all phases of site evaluation and construction.

2.3.15 Reveille Valley Mill Site/Indian Encampment Area/Pete Ranch - The CGTO knows that within the Reveille Valley are the remnants of a small gold mill site that employed some native people. This is evidenced by the American Indian cultural sites found in the eastern foothills of the Kawich Range. Water was available in the area and supported an orchard of oak trees. Nearby a hot spring runs through the land, making the use of the land highly desirable and conducive to ceremonies and general living. The area hosts a number of cultural resources of special interest to the CGTO, such as the springs. According to Western Shoshone and Southern Paiute people, the springs are the homes of the water babies or little deities that have special powers, thus enabling them to travel through underground water channels to other areas. The hot

springs and hot mud that comes from deep within the earth are used by native people for traditional healing and ceremonial purposes. The vegetation was abundant and contributed to the natural animal habitats that made hunting excellent in this area. Based on the location of the proposed rail alignment, a gradual ascent from this area to Warm Springs Pass, ten miles to the north, would occur. The AIWS believes that without further ethnographic study and cultural evaluations, a thorough assessment cannot be completed. Therefore, the CGTO recommends that a site visitation be scheduled with tribal representatives to evaluate the significant cultural resources located in the area to understand the implications surrounding the construction of the rail alignment in this area.

Additionally, Pete Ranch was the home of a present day Western Shoshone family that currently resides in Tonopah and Reno, Nevada. They are enrolled members in the Yomba Shoshone Tribe and have family ties to numerous reservations and Indian communities throughout Nevada. Previously, some efforts were independently conducted to document the contributions of the Pete family, however, no comprehensive ethnographic studies have been conducted to thoroughly evaluate the significance of the area. Presently, there is significant archaeological evidence remaining from the Pete family and the Indian people that previously occupied the area. The YMP should fund such a study and prior to making any decisions to finalize the rail corridor location, the YMP must evaluate the adverse impacts on the cultural viewshed. Again, Indian monitors should be present during evaluation and construction as well as the conduction of a traditional healing ceremony by a spiritual leader.

2.3.16 Willow Witch Well/Rock Art Canyon – The AIWS visited the Reveille Valley hydrological area and the CGTO knows that these aboriginal lands contain important cultural resources which include natural landforms, plants, animals, and unusual visual aesthetics. In the Indian culture, water baby deities live in underground aquifers which travel throughout the Great Basin. Traditional activities of the Western Shoshone, Southern Paiute, and Owens Valley Paiutes and Shoshones formed this archaeological setting. The naming of the Reveille Valley comes from the time when the military was in the area blowing the bugle of charge and retreat. The military was known to visit this area between the mid-1860s up and into the early 1900s to subjugate the Indians. Considering this remote location, this site appears to be in fairly pristine condition. The site contains a unique and isolated canyon complex with petroglyphs that may not be formally recorded. The YMP should support the recordation of these important archaeological and cultural resources with Indian monitors present. The proposed rail corridor is slated to travel near the petroglyph canyon. Any significant vibration from the train will adversely impact this fragile site. In addition, the cultural viewshed will be adversely impacted as it causes a break in the openness that is associated with this site. The specific petroglyphs are put in this location because of the power that is found within the surrounding mountains and valleys. Any disturbance will cause an unbalance of the area. The CGTO recommends that systematic studies be conducted to thoroughly evaluate the impacts to this resource. Moreover, the CGTO believes that the cultural significance of the entire Reveille Valley hydrological area cannot be assessed until systematic studies are planned and conducted incorporating the traditional knowledge of Indian people from the area. A traditional balancing ceremony should also be conducted.

2.3.17 Caliente Area/Meadow Valley Wash/Hanging Tree/Eccles Option – The Caliente area contains numerous resources and is the home of many Southern Paiute families that still reside in the area. The CGTO knows that the Caliente and Meadow Valley Wash area contain important cultural resources pertinent to their culture. The richness and fertile soil highlight the eastern portion of the State of Nevada. The hydrological system is well documented and is evidenced in

the descriptive songs of native people that comprise a songscape that travels through the area. Further evidence of private enterprises and land ownership present a land use plan that has been in existence for a number of years. Clover Valley is situated near the town of Caliente and is known to be the habitat for various animals including Golden Eagles. Abundant water sources and plant species are found within this area that is presently used by the Union Pacific Railroad.

Tribal members recall a Southern Paiute massacre in the mid-1800s that was the result of false accusations of many Paiute people for a murder that occurred near the local Mormon community. Most recently, in 2004, Southern Paiute representatives conducted a traditional memorial service in the Meadow Valley area to pay tribute and restore balance. The AIWS believes that the area needs to be protected to honor the Indian people who lost their lives in the massacre. Additionally, the proposed rail corridor would adversely impact a natural hot springs that was and is used by Indian people for medicinal purposes. Several rock art panels are known to exist in the area and would be impacted from construction and rail shipments passing through this sensitive area.

Similarly, a large cottonwood tree known to local residents as the “hanging tree” is located in the area and may have been a place where Indian people lost their lives. The CGTO does not support any rail alignment passing through this area and recommends further ethnographic studies be conducted. If it is determined that Indian people were hung in this area, a traditional ceremony must be conducted to restore balance, thus adding rise to additional concerns being expressed about transporting waste near or through this area.

In 1997, the CGTO expressed concerns about past atrocities that occurred in the area and the subsequent development including the Union Pacific rail system. In 2004 the area was selected as the future siting of the proposed rail alignment for Yucca Mountain. In 2005 severe flooding occurred causing extensive damage to the existing rail system and a parked train. Indian people believe that this damage was foreseen and to be expected due to the disrespect shown to the area and the disregard for traditional healing ceremonies needing to be conducted.

These areas have been previously evaluated by other federal agencies and are known to have tremendous cultural significance. Members of the CGTO assessed this area in 1997, again stating its importance in the report, *Native Americans Respond to the Transportation of Low Level Radioactive Waste to the Nevada Test Site, Sept. 1998* (and noting numerous concerns). Efforts should be made to cite those findings and financially support a similar study focusing on the transportation of high-level nuclear waste and spent nuclear fuel to Yucca Mountain.

Additionally, in regards to the Eccles Option, the YMP should coordinate its activities to coincide with the existing railroad to minimize impacts to the area.

2.3.18 Dry Lake Valley/Charcoal Ovens/White River Valley –The CGTO has indicated that dry lakes played an important role in traditional ceremonies, stories, trail systems, and song and storyscapes. They are important to wildlife and the Indian people as a means of sustaining life. Indian people know that dry lakes are surrounded typically by mountains or other geologic phenomenon that make up important elements of the panoramic landscape. The CGTO is also aware that dry lakes can collect unusually high quantities of water during stormy seasons, thereby creating unstable conditions that should be avoided by the proposed rail alignment. Careful consideration should be given to the cultural implications identified by the AIWS and the CGTO.

The Charcoal Ovens are eligible and should be listed on the National Register of Historic Places if not already done. The AIWS believes that Indian people assisted in the construction and operation of the ovens, most likely being utilized for manual labor to collect the mineral resources that were determined suitable for their construction. During the acquisition of the minerals, it is customary for Indian people to collect items of need in a culturally appropriate manner including singing, offering prayers, and leaving offerings so as not to disrupt the natural balance. Throughout Nevada, charcoal ovens are found and were not only used in the production of charcoal but for shelter and other activities by Indian people.

Within the White River Valley is an area known as the White River Narrows that has numerous recorded petroglyph panels. The panels were referenced in a report written by William White formally with the Harry Reid Center for Environmental Studies at the University of Nevada, Las Vegas. The CGTO Document Review Committee reviewed this particular report in 2001 as part of the Nellis Air Force Base NAIP. In an attempt to preserve the panels, some of the petroglyph panels located on the west side of SR 318 have been fenced off by the BLM as part of their range management activities. Petroglyph and pictograph panels are also located on the east side of SR 318.

The White River Narrows is a recognized joint-use area by various tribal groups in surrounding locations. The location is considered sensitive to Indian people because of its archaeological evidence including the extensive rock art, stone tools, rockshelters and other cultural resources. The constricted mouth of the canyon is typical of locations that exude great power and energy. Although the area has been previously recorded as an archaeological site, no ethnographic studies have been conducted. The YMP should support such a study and provide on-site Indian monitors following a traditional blessing ceremony.

The White River, like the Amargosa River, has significant cultural resources and archaeological sites that line its banks. The hydrological system sustains many ecosystems in its path to form a convergence that makes this location suitable as a place of power and ideal to sustain life. The rail line may come through a Wilderness Study Area located in this valley. The water feeds the Pahrangat Valley, Maynard Lake, Crystal Springs near the junction of Highway 93, and Highway 375 by Hiko, Nevada, and flows into the Muddy River near Moapa, Nevada. Information about the series of warm springs at Crystal Springs that supported former habitation by Indian people and was the source of important foods and medicines, is discussed in a final report entitled: *Additional Cultural Resources Baseline Data for the Yucca Mountain Nevada Transportation Scenario* written by Paul R. Nickens and William T. Hartwell. The CGTO does not support the development of the proposed rail system through this area and recommends additional systematic ethnographic studies be conducted to fully assess its cultural importance.

2.3.19 Timber Mountain Pass/Sheep Corral/Coal Valley – The CGTO knows that Timber Mountain Pass holds important cultural resources and areas of significance critical to the heritage of the American Indian. Western Shoshone people have expressed concerns about the importance of Timber Mountain. Until more information can be obtained through interviews and site visits by the CGTO to this area, the CGTO recommends no work or disturbance occur.

2.3.20 Garden Valley/Heizer Ranch – This vast valley holds trail systems used for trade, commerce, pilgrimage, and to retreat into the next mountain range when safety measures of peace were sought. The CGTO knows that all lands included integration and a sense of balance and harmony. The land sustained the Indian people because they understood the importance of the resources, how to properly care for them, and most importantly how to live in harmony with

all of the natural and cultural elements. Systematic studies incorporating the seven elements identified in Section 2.2.1 should occur to fully understand the actual and perceived risks associated from the construction of the proposed rail system and the transportation of high-level waste and spent nuclear fuel.

2.3.21 Quinn Canyon/Black Top Archaeological Site – The CGTO is aware that cultural resources and archaeological sites are important findings to the heritage of Western Shoshone, Southern Paiute, and Owens Valley Paiute since the beginning of time. The land has poured out its sustenance to the native people and in return the native people allied themselves with this sustenance becoming active stewards and the voice for the continuity of the well being of mother earth. Quinn Canyon is a unique area located in a constricted pass. It is an archaeological district and cultural landscape, not a site. In 1906, in areas east of the canyon, there occurred a massacre by the military on Native Americans residing in the vicinity. To protect themselves, the native people retreated into the Quinn Mountain Range next to a spring where many men, women, and children were massacred. The incident resulted in one of the Indian children losing his arm in the conflict. The child was subsequently adopted by the non-Indian Sharp Family and became known as *One-Arm Bob Sharp*. Reports indicate *One-Arm Bob* received a 40-acre allotment of land from the federal government. *One-Arm Bob* lived in this area until his death and it is reported that bone fragments and other human remains can still be found in the area of the original massacre. According to Indian history, a bugle that was lost during the massacre was found by one of the native people who learned to mimic various military songs. The bugle is currently on display at the White Pine County museum in Ely, Nevada. Information has been collected by the U.S. Forest Service office in Reno, Nevada, and should be used to evaluate the historical importance and cultural significance of this area. Due to the traditional knowledge of tribal elders concerning the importance of the area, tribal representatives recommend the area be avoided. A traditional blessing and memorial service should also be conducted.

Documented literature by field anthropologist Bob McCracken, Ph.D. provides information on this event, which was recorded in the 1980s. Another unusual occurrence was the crash of a large meteorite in the early 1900s that fell to the ground around Quinn Mountain. Various non-Indian people took chunks of the meteorite because of the special power associated with the event but revered the area as being extremely powerful. Indian people referred to the event, as a star falling from the sky and avoided the area so as not to bring harm to themselves. During this period, Native people lived in this area relying on traditional ways of life until the turn of the twentieth century. Today the area is less populated and remains a haven for both Indian and non-Indian game hunters. The CGTO recommends additional studies be conducted to fully assess the cultural significance of the area.

The Black Top Archaeological site was identified by Indian people during the first site visit and is located at the southern portion of the Quinn Canyon Range. The AIWS has suggested the name of Black Top because of the association to the nearby mountain with the same name. The site is located in a valley adjacent to an existing road. Indian people observed several examples of cultural resources including rock shelters, obsidian, pobs, pottery, juniper, rabbit brush, Indian tea, scrub brush, and creosote. Indian people describe the visual aesthetics as excellent and as an integral part of the panoramic viewshed. The canyon has highlighted pink and red pigmented rock formations that are believed to be a place of power. The YMP rail alignment is currently slated to travel directly through this culturally sensitive area that has yet to be studied and evaluated by Indian people. Indian people believe that this location will be a cultural and engineering challenge if selected. Based on the site visit, it appears that the designers of the rail corridor did not familiarize themselves with the hydrologic and geologic obstacles that are

present. No boundaries for the area were designated due the vastness of the area and time constraints placed on the visit. Tribal representatives indicated that this area is part of a much larger landscape that will be adversely impacted from the proposed rail corridor. It is unknown whether or not this site has been previously documented or recorded. The CGTO believes that it is imperative that any consideration to place the current rail alignment in this area must be re-evaluated and moved to avoid impacts to the Black Top site. The area is considered culturally important due to its resources and location and it should be protected and avoided. The CGTO requests that extensive systematic studies of the entire site and surrounding areas be conducted prior to final designation of the rail corridor. The CGTO recommends a subgroup consisting of the AIWS and additional tribal members from each of the three ethnic groups visit the area for further evaluation. A traditional blessing ceremony should be conducted and Indian monitors should be utilized for all phases of evaluation and construction activities.

2.3.22 Alice Hill - Currently, this area has been identified for the proposed rail alignment to run nearby. The area is considered to be a very important site both culturally and archaeologically. In the 1980s Alice Hill was selected for exploratory trenches by the United States Geological Survey (USGS). During field testing, the site revealed an exorbitant amount of artifacts and is the location of many plants used for foods and medicines. Tribal representatives and spiritual leaders have visited the area and described it as a place of great importance. In the absence of systematic ethnographic studies, it is difficult to collectively express the significance of this important area. The CGTO would recommend that no further ground-disturbing activities occur or be considered for this area.

2.3.23 Ash Meadows – The Ash Meadows area is believed by Indian people to be related to Fortymile canyon and the water sources found at Yucca Mountain. The area was used traditionally by Southern Paiute and Western Shoshone people who frequented the area because of its high content of medicinal plants and springs. Indian people practiced true horticulture by cultivating crops of corn, squash, beans, sunflowers, and various melons irrigated through the abundant springs in the area. Devils Hole is a source for numerous traditional stories told by the Southern Paiutes and Western Shoshone who still hold Ash Meadows in high regard. Ash Meadows is located away from Yucca Mountain but has been included in early ethnographic studies and site visits by Indian representatives involved with the YMP NAIP. The YMP currently monitors springs located in the area as part of the hydrology studies program. Since there is a correlation between the water system in Ash Meadows and the YMP, as confirmed both culturally and scientifically, the CGTO recommends that expanded ethnographic studies be conducted in the area to ascertain the impacts from the YMP.

2.3.24 Spring Mountains - The Spring Mountains are considered by the Southern Paiutes to be part of their traditional holyland. The area is the foundation of many traditional stories including the creation of the Southern Paiute people. The Spring Mountains are believed to be related to other areas that make up part of the trail to the afterlife. While the Spring Mountains fall outside of the YMP study area, Indian people believe that the YMP may impact the cultural ecosystem located in the area.

2.3.25 Summary - It should be noted that not all areas along the rail alignment were visited by the AIWS. Only those areas described in this document were observed due to time constraints and inclement weather. The CGTO is aware that thousands of archaeological and cultural resource sites are present and still need to be systematically evaluated and recorded. The full scope of implications associated with the rail corridor cannot be systematically assessed nor

understood without the benefit of having all members of the AIWS visit the actual footprint of the rail alignment. The CGTO believes that the range of sites that were observed are associated with cultural and traditional lifeways through the examples of artifacts and archaeological sites, songscapes, and storyscapes that are still sung and talked about today.

2.4 OCCUPATIONAL AND PUBLIC HEALTH AND SAFETY/RADIATION

2.4.1 Risk Perception versus Risk Assessment

The CGTO is aware that, typically, risk assessment models have been used and accepted as a means of mathematically calculating potential risks and assessments to human health and safety. While these models project the potential impacts based on a worst-case scenario, they do not consider the perceived risks which are considered meaningful to Indian people. The lack of knowledge of an unfamiliar concept can lead to a feeling of perceived danger. A perceived danger or hazard associated with something can be very real to Indian people. Indian people view things holistically and believe that everything is interrelated, resulting in a cause-and-effect model. This is contrary to scientific models that tend to compartmentalize things from a mathematical point of view, calculating potential risks to health and safety. This viewpoint often does not consider perceived risks which play an integral role to American Indian cultural beliefs. Therefore, perceived risks must also be considered in the risk analysis model to further understand the risks to health and safety from a cultural perspective.

Ultimately, the CGTO realizes that 6 basic factors will be used to arrive at various decisions regarding issues such as the selection of transportation corridors for the movement of high-level waste and spent nuclear fuel to the proposed repository at Yucca Mountain. These factors will most likely be based on (1) the ease of building; (2) socioeconomics; (3) construction costs; (4) impacts to environmental resources; (5) noise impacts; and (6) least controversial scenarios. Ironically, many of these factors coincide with the Indian point-of-view, in that the CGTO is concerned about impacts to tribal members and the people they represent, tribal economics and enterprises, flora and fauna which is considered vital to cultural survival, important resources which may be damaged from ground-disturbing activities, and the effects of shipments of high-level waste and spent nuclear fuel through the traditional holy lands of the Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone people. Again, the most efficient way to thoroughly understand and evaluate risk perception is to have a study design developed by qualified individuals who have the experience and trust of Indian people. The DOE should immediately initiate systematic studies relating to the proposed rail corridor that incorporate a means of understanding the cultural dynamics of Indian people and the potential impacts associated with this current endeavor.

2.4.2 “Angry Rock” Concept

Indian people believe that various perceived risks are present and occur as a result of various activities. Although there are no Indian words for terms such as *radiation*, early ethnographic studies supported by the DOE documented a traditional view of radioactivity that centers on the perception by Indian elders of radiation being produced by an *angry rock* (Stoffle et al., 1989a). Briefly, this view is outlined in the following paragraphs.

Rocks have power. It is recognized that some rocks have more or different power than others. Breaking a rock or removing it from its place without fully explaining these actions not only

releases the power inherent in the rock, but also angers the rock. This can result in the creation of a source for cultural anomalies, which upsets the balance of the cultural ecosystem and affects Indian people.

Rocks can also be self-willing, in as much as they can reveal themselves to people and act on people. Crystals, for example, have a self-willing, animate power, and will reveal themselves to a person whom they desire to be with. If this person picks them up, the person will have great luck. The luck, however, is taken away from others and eventually people will come to recognize this fact and single out the excessively lucky person as having used some non-human power at the expense of his or her people. Usually the person takes the crystal back to where it had revealed itself and returns it with an explanation of why it was being returned.

Radioactivity was interpreted as being the angry action of a powerful rock that had been quarried without its permission and had its power used for purposes it did not agree to. Now the remains of the rock (radioactive waste) is angry and it is taking its anger out on things around it. Plants, animals, people, water, and even the air itself can be hurt or even killed by the radiation from the angry rock. Indian people express the belief that past radiation releases have contaminated plants and animals traditionally used for foods and medicines. Spiritual people believe that they can see and feel radiation, that it has unique colors. This is why they can neither eat nor collect some plants, animals, and minerals in some areas. It is now impossible for Indian people to go to certain places, conduct certain ceremonies, and eat certain foods because of the release of radiation from the angry rock.

Indian people believe that single-purpose casks, disposal canisters, and dual-purpose canisters which are being designed and proposed for transporting spent nuclear fuel and high level radioactive waste, will not be sufficient to contain the elements from the angry rock. The CGTO is aware that the DOE has conducted numerous scientific studies to determine the feasibility, strength, and necessary design to contain and transport the radioactive waste. However, these studies have only examined the scientific aspects and design without consideration to the cultural beliefs of the Indian people.

2.4.3 Air: Living and Dead

Indian people express the belief that the air is alive. There are different kinds of air with different names in Indian language. The Creator puts life into the air which is shared by all living things. When a child is born, he pulls in the air to begin its life. The mother watches carefully to make sure that the first breath is natural and that there is no obstruction in the throat. It is believed that if the day of birth is a windy day, it is a good day and the child will have a good life. According to one elder:

"The seasons-like winter, spring, summer, and fall-they're all important when a child comes into the world because their spirit is tied in with the harvest, or hunt; they say that it gets kind of like into their blood and they become hunters or farmers. You can listen to the wind, the wind talks to you. Things happen in nature. Our people had weather watchers, who are kinds of people who will know when crops and things should be done. They watch the different elements in nature and pray to ask the winds to come and talk about these things. Sometimes you ask the north wind to come down and cool the weather. The north wind is asked to blow away the footsteps of the people who have passed on to the afterlife. That kind of wind helps people, it is positive. The wind also brings you songs and messages. Sometimes the messages are about healing people, a sign that the sickness is gone now from

the person, or that it is coming to get that sickness to take it away, or it is coming to bring you the strength that you need to deal with the illness."

But air can be destroyed by radiation that has been released by the angry rock, thus causing pockets of dead air. There is only so much alive air, which surrounds the world. If you kill the living air, it is gone forever and cannot be restored. Dead air lacks the spirituality and life necessary to support other life forms. Airplanes crash when they fly through dead air. One member of the CGTO compared this Indian view of killing air with what happens when a jet flies through the air and consumes all of the oxygen, producing a condition where another jet cannot fly through the air. The atomic blast consumes the oxygen like the jet, killing the air. While this comparison of the Western science view of dead air from burning seems close to the Indian perspective, the latter has a "life force" component that makes killing air more significant than just consuming its natural components.

Some Indian people who were present during the aboveground atomic blasts at the NTS believe that the sickness they have today came from the radiation. To some of these people, the effects of the radiation were in addition to what happened when the air itself was killed. Some elders today say that even when the plants survive the effects of radiation, the dead air killed them or made them lose their power, their spiritual power to heal things.

If the DOE wants to better understand Indian peoples' feelings about the impacts of activities on their cultures, they should support studies designed, conducted, and produced by the CGTO. Previously, there have been limited studies of American Indians perceptions of identification and impacts to cultural resources. Without comprehensive and systematic studies, it is difficult to provide detailed information about the impacts to cultural resources from YMP-associated activities.

2.5 ENVIRONMENTAL JUSTICE AND EQUITY

Federal agencies are directed by Executive Order 12898 to detect and mitigate potential disproportionately high and adverse human health or environmental effects of its planned programs, policies, and activities to promote nondiscrimination among various populations in the United States. The CGTO knows of two violations of this act that have derived from past and proposed YMP programs, policies, and activities. These are (1) holy land violations, and (2) cultural survival-access violations. Evidence for each of these violations varies. There is no question that only the holy lands of Indian peoples have been, continue to be, and will be impacted by YMP actions. There is no question that only Indian people have lost cultural traditions because they have been denied access to places within the YMP study area where ceremonies have or need to occur, where plants need to be gathered, and where animals need to be hunted in a traditional way. Studies of how Indian people perceive themselves to be at risk and what social and cultural impacts derived from these risk perceptions can be conducted, but have not been analyzed thus far.

2.5.1 Holy Land Violations

American Indian people who belong to the CGTO consider that much of the land along the proposed rail corridor to be as central in their lives today as these lands have been since the creation of these people. The proposed impact area(s) are a part of the traditional holy lands of Western Shoshone, Southern Paiute and Owens Valley Paiute and Shoshone peoples. These

holy lands and their resources have been subjected to exorbitant amounts of damage by long-term nuclear testing activities involving the NTS and site characterization activities associated with the YMP. The CGTO believes that the past, present, and future pollution of these holy lands constitutes both Environmental Justice and equity violations. No other people have had their holy lands impacted by YMP-related activities. Prior to undertaking or approving new activities, the CGTO should be funded to design, conduct, and produce a systematic American Indian Environmental Justice Study.

2.5.2 Cultural Survival-Access Violations

One of the most detrimental consequences of YMP operations on the survival of American Indian culture, religion, and society has been the denial of free access to their traditional lands and resources. Loss of access to traditional foodstuffs and medicine has greatly contributed to undermining the cultural well being of Indian people. These Indian people have experienced, and will continue to experience, breakdowns in the process of cultural transmission due to lack of access to YMP lands and resources. The construction and use of the proposed rail corridor will add to such impacts to the land and the perpetuation of Indian culture. No other people have experienced or been subjected to similar cultural survival impacts attributed to access limitations within the YMP area.

In 1996, President Clinton signed Executive Order 13007, *Indian Sacred Sites*. The Order promotes accommodation of access to American Indian sacred sites by Indian religious practitioners and provides for the protection of the physical integrity of such sites located on federal lands. The CGTO recommends that open access be allowed for American Indians who must conduct their traditional ceremonies and obtain resources within the area of the proposed rail corridor. Unfortunately, however, land disturbance and irreparable damage of cultural landscapes, TCPs, and cultural resources may render certain locations unusable.

To date, no systematic evaluation of traditional sacred sites or places along the rail alignment have been made by Indian people including the opportunity for all members of the AIWS to evaluate the alignment. Without proper studies and consultation, no specific statements about access to particular locations can be made at this time.

2.6 OUTLINE OF SOCIAL AND ECONOMIC ISSUES

2.6.1 Transportation and Tribal Enterprises

Of particular concern to the CGTO, are the perceived impacts and cumulative effects of YMP operations on the tribal economy, particularly regarding the issue of high-level nuclear waste and spent nuclear fuel being transported across reservation and ancestral lands. To date, only minimal efforts have been made to investigate socioeconomic impacts of YMP activities on Indian tribes and organizations. Ongoing research by the AIWS on such effects suggests, for example, that waste transportation would potentially be detrimental to the economic success of tribal-owned businesses and may increase the cost of insurance policies. Currently, there are no compensation measures planned nor mitigation efforts taken by the federal government to improve the socioeconomic problems of tribes and organizations directly affected by YMP operations. Similarly, no efforts have been made to distribute equally the benefits and losses caused by YMP operations among Indian and non-Indian populations.

The Western Shoshone Nation, and more specifically the Timbisha Shoshone Tribe, expresses significant concern regarding the proposed rail alignment directly traversing on or near tribal lands near Lida Junction and U.S. 95. It is the opinion of the AIWS that the proposed corridors are expected to pass through land currently or formally occupied by various Indian tribes belonging to the CGTO. The AIWS has recommended to the CGTO and the DOE that transportation corridors, rail or otherwise, be situated in locations which do not disturb important cultural resource sites, TCPs, and sacred sites. The AIWS recommended that systematic studies be initiated cooperatively between the CGTO and the DOE to ascertain the impacts to cultural resources and the Indian people who live and gather foods and medicines along these corridors.

Transportation and dose assessments resulting from potential accidents and normal conditions have been identified as areas of concern by tribal governments. These assessments are believed to illustrate a disproportionate health risk due to the concentration of tribal members who reside at one location and their fear of the consumption of traditional foods and medicines which may have become contaminated. The results of potential accidents are believed to result in negative impacts on tribal economies, tourism, infrastructure, and cultural well-being.

Other issues of concern identified and received during Tribal Update Meetings and other forums were emergency preparedness support, environmental justice, protection of and access to cultural resource sites, and cultural differences and perspectives relating to the storage of spent nuclear fuel and high-level radioactive waste. Throughout the YMP NAIP, Indian people have expressed similar concerns about potential negative impacts from the transportation of high-level radioactive waste and spent nuclear fuel to a geologic repository at Yucca Mountain. Since the inception of this program, culturally affiliated Indian tribal governments, in addition to the collective voice of the CGTO, have gone on record as formally opposing the Yucca Mountain Project. The AIWS believes that ongoing studies conducted as part of the NAIP have illustrated these continuous concerns and have become the basis for better understanding the perspectives of Indian people.

According to the CGTO, many tribes have developed or are considering economic development strategies to include tribal enterprises that may be impacted by the rail alignment. In some situations, tribes are developing light industries that may provide goods and services to the DOE, NTS, or Department of Defense military activities. Other considerations may be the access or distribution of water needed during construction that may be offered for purchase by tribal enterprises. As such, a rail spur might be determined necessary to enhance shipping and receiving efforts in support of tribal enterprises.

2.6.2 Hazardous Materials and Waste

The storage of hazardous materials and wastes are those substances defined as hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA). In general, hazardous materials include substances that, due to their quantity, concentration, physical, chemical, or infectious characteristics, may present substantial danger to public health, welfare, or the environment if released into the environment. The resource is typically discussed under four primary categories: hazardous materials, installation restoration program sites, hazardous waste, and solid waste.

Indian people hold both traditional and scientific views of hazardous materials and waste. As an example, the former builds on the view that all resources including the rocks are alive;

radioactive rocks are powerful, but they can become “angry rocks” if they are removed without proper ceremony, used in a culturally inappropriate way, disposed of without ceremony, or placed where they do not want to be (Stoffle et al., 1989a and 1990c). In general, after properly removed rocks have been used, they are either returned to their place of origin or to a place of cultural significance. The practice of dealing with “bad medicine” or neutralizing negative forces was a part of the traditional culture. So, the question of how to dispose of hazardous materials and waste in a culturally appropriate manner could be resolved if the time and resources were provided to tribes to participate in a formal study of this issue. Indian people have not studied the cultural impacts of siting any of the existing waste facilities. So, Indian people would like to become a part of a retrospective assessment of these facilities, as well as to participate in the assessment of siting all new waste facilities. The CGTO recommends that adequate funds and time be provided so that Indian people can conduct systematic studies of waste management programs.

3.0 SUMMARY OF AMERICAN INDIAN RESPONSES TO THE EIS FOR THE YMP RAIL CORRIDOR

The DOE proposes to construct a rail system to transport 70,000 metric tons of heavy metal commercial and DOE-owned high-level radioactive waste and spent nuclear fuel from Caliente, Nevada to Yucca Mountain. The response of the CGTO to the proposed action and alternative of the DOE YMP is summarized in the following sections.

3.1 PROPOSED ACTION

The DOE proposes to construct operate and possibly abandon a rail line and associated infrastructure for the shipment of spent nuclear fuel, high-level radioactive waste, and other materials from a site near Caliente, Nevada, to the proposed repository at Yucca Mountain. In addition, the DOE would seek withdrawal of the selected alignment for the railroad from public domain or obtain right-of-way. Two alternatives are analyzed in the EIS: the Shared Use Alternative and the No Action Alternative. The Shared Use Alternative would allow private companies and other organizations to ship commercial commodities on the proposed rail line described in the Proposed Action. The No Action Alternative would not allow the branch line to be constructed and spent nuclear fuel, high-level waste and other materials would be shipped by truck within the State of Nevada to a repository at Yucca Mountain.

3.1.1 CGTO Response to Proposed Action

The CGTO has continually stated its opposition to the siting and transportation of spent nuclear fuel and high-level waste to a repository at Yucca Mountain. Accordingly, the Proposed Action to construct, operate, and possibly abandon a rail line and associated infrastructure for the shipment of said materials from a site near Caliente, Lincoln County, Nevada is not supported by the CGTO. The two alternatives that are being considered in the EIS consisting of the Shared Use Alternative and the No Action Alternative are also not supported by the CGTO. Moreover, any disturbance to cultural, biological, botanical, geological, and hydrological resources including viewscales, songscales, storyscales and traditional cultural properties will cause adverse impacts and be opposed by the CGTO.

Although the CGTO is opposed to the proposed action and alternatives, there may exist the potential interest from some tribal groups in having a rail spur located on or near tribal lands in the event that tribal enterprises or light industry could be planned or developed. Such development would require access to the rail system should the Shared Use Alternative be selected. In the event that the Shared Use Alternative is selected, those tribes expressing an interest in having access to the rail system, should receive appropriate funding to construct access to the rail system from an adjoining rail spur.

The CGTO is aware that the estimated time for construction of the proposed rail line and associated facilities is 3 to 4 years. Construction would occur at up to 11 locations simultaneously for road bed construction and up to three locations for laying rail along the alignment. Major structures such as bridges and grade-separated crossings would be started first. Temporary access roads would be constructed to reach rail line construction initiation points and major structures, such as bridges and to allow movement of equipment to the construction initiation points.

The construction of the proposed rail line would require the clearing and excavation of previously undisturbed lands and the establishment of borrow and spoil areas outside the corridor. Typically, heavy-duty construction equipment (front-end loaders, power shovels, scrapers, generators, compressors, dump trucks, and other diesel-powered support equipment) would be used in the clearing and excavation work.

Heavy equipment and those individuals who are responsible for its safe operation are of major concern to the CGTO. Tribal representatives have extensive experience with similar construction projects whereby inadvertent disturbance to important cultural resources occur from unsuspecting on-site workers. The CGTO should assist in the development of a cultural resource management and mitigation plan to prevent the potential for disturbance. Accordingly, on-site Indian monitors are needed during all phases of construction in the event of inadvertent discoveries or impacts to culturally sensitive areas or resources.

Water would be required during construction at the rate of 900,000 gallons per mile. This is proposed to include water spread by water bowsers for dust mitigation during construction. Several methods for obtaining water are being considered including building temporary wells along the corridor, importing water from other states, shipping water from Caliente, Nevada, purchasing water rights from local holders, applying for water rights from the Nevada State Engineer, or a combination of any of the above.

The CGTO is aware and has knowledge about hydrological systems and the interconnectedness of the water within the proposed rail corridor. The CGTO is concerned about the dust particles that will be generated from construction activities and recommends that strict adherence to Environmental Protection Agency and other corresponding guidelines. Additionally, no consideration is given to tribal groups and enterprises who may be interested in providing water for the proposed project. The CGTO believes those tribal groups and their respective enterprises should have first right of refusal with respect to providing water for construction activities. For those tribes not interested in providing water for the project but impacted from the construction and operation of the proposed rail system, the DOE should provide newly constructed wells for tribal communities and enterprises. Tribes interested in providing water for purchase should be offered the opportunity to enter into negotiations with the DOE for this purpose.

3.2 SHARED USE ALTERNATIVE

The Shared Use Alternative would involve the use of the proposed rail line for general freight, such as mineral resources or oil that could be shipped by private companies on DOE's branch line and may include shipments to the NTS, and to support Air Force operations.

3.2.1 CGTO Response to the Shared Use Alternative

The CGTO does not support any alternative in the absence of systematic ethnographic and cultural assessments. The Shared Use Alternative includes the transportation of high-level waste and spent nuclear fuel and the CGTO believes adverse impacts to cultural and natural resources will be associated with the siting of a new rail system. The CGTO does, however, support negotiations on a government-to-government basis between those Indian tribes that are adversely impacted and the DOE. The CGTO is aware that many tribes along the proposed corridor have implemented comprehensive economic development plans that include light industry to be located on tribal lands. The potential for tribes to have a separate rail spur included in the design

phase of the rail system and subsequently built during the construction phase under this alternative would allow for the shipment of tribal products. In the event that tribal groups initiate excavation and production of mineral or petroleum products, the DOE should give priority to tribal enterprises that can provide products or items needed by the DOE, NTS or in support of United States Air Force operations. Clearly, serious consideration must be given to the segregation of such items from high-level waste and spent nuclear fuel shipments.

Many tribes along the proposed rail corridor believe that they will be impacted from the transportation of high-level waste and spent nuclear fuel and have not had the opportunity to share their concerns through systematic ethnographic and perceived-risk transportation studies similar to a study that was conducted by the NTS. In the event of any construction, the CGTO recommends that systematic ethnographic studies be conducted.

3.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, spent nuclear fuel, high-level radioactive waste, and other materials to construct and operate the repository would be shipped by a combination of legal-weight and heavy-haul truck within Nevada to the repository. The majority of the truck casks would still be delivered from the generators to a site near Caliente, Nevada by rail as indicated in DOE's April 2, 2004 decision on the preferred mode of transportation. However, the branch line would not be built in Nevada.

3.3.1 CGTO Response to the No Action Alternative

The CGTO does not support the No Action Alternative, as proposed, because of the potential threat to American Indian cultural resources, sacred sites, and TCPs located along the proposed rail line. No systematic studies involving Indian people have been completed along the transportation corridor. The CGTO would recommend that an evaluation and systematic study of culturally significant places be conducted consistent with applicable federal laws, executive orders and agency policies. The CGTO recommends that the YMP continue to protect cultural resources, sacred sites and TCPs in cooperation with the CGTO. The CGTO would request first right of refusal, in the event that the YMP lands are made available for public use.

The CGTO is further aware, that access by Indian people to cultural resources, sacred sites and TCPs may be reduced and the DOE must implement protective measures. Emphasis on the protection and preservation of cultural resources, sacred sites, and TCPs should be achieved cooperatively with the CGTO and the YMP through the NAIP. Regardless of the alternative selected, serious consideration must be given to access provisions and be consistent with applicable federal laws, executive orders, and agency policies. A co-management plan and Memorandum of Understanding should be developed between the YMP and the CGTO. This approach would provide a mechanism for reaffirming the DOE's long-term commitment of consultation with Indian people on a government-to-government basis.

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4.0 SUMMARY OF FINDINGS / RECOMMENDATIONS / CONCERNS

4.1 RUBY VALLEY TREATY

The CGTO supports the efforts of the Western Shoshone to have the Ruby Valley Treaty of 1863 be fully recognized as originally intended. Previously, the YMP has relied on the Supreme Court Decision of *U.S. v. Dann* as a means of abrogating their trust responsibilities. The focus of this case dealt with trespass violations associated with grazing cattle on government land. In the opinion of the Western Shoshone people, this treaty of *peace and friendship* is still in full force and affect. Subsequent, to this court decision, the Western Shoshone Nation brought the matter before the United Nations and the Organization of Human Rights in Geneva, Switzerland. On January 9, 2003, the Inter-American Commission on Human Rights rendered its final decision in the case of Western Shoshone land rights in the favor of Mary and Carrie Dann. This international body found the actions of the U.S. Government to be in violation of Western Shoshone rights with regard to property, due process, and equality under the law.

In 2004 the United States attempted to bring closure to Western Shoshone claims by offering compensation. This highly controversial action has not affected nor diminished the aboriginal claims of the Western Shoshone to the land. In the previous referenced document developed by the AIWS and related comments received in response to the Final EIS for a geologic repository at Yucca Mountain, Nevada, the DOE failed to uphold their trust responsibility and negotiate further with the Western Shoshone Nation. No nation-to-nation discussions as promulgated under federal law have occurred. In this regard, the Western Shoshone Nation should receive equal treatment as afforded to other countries.

In March 2005, the Western Shoshone Nation filed a lawsuit against the DOE for the siting of a High-Level Nuclear Waste and Spent Nuclear Fuel Underground Geologic Repository at Yucca Mountain. It is the position of the Western Shoshone that such action being proposed by the DOE violates the terms and conditions of the Ruby Valley Treaty of 1863. Although the case has not been heard, the CGTO recommends that the DOE abide by the treaty as originally intended.

4.2 FUNDING

Previously, some of the member tribes of the CGTO applied to the Department of Interior for *Affected Status* as stipulated in the Nuclear Waste Policy Act. Unfortunately, these applications were denied. In subsequent requests to the DOE, tribes were advised that no assistance could be provided due to the lack of a decision of a proposed transportation route. Currently, proposed routes have been selected and are being evaluated. As a result of these selections, many important resources may be disturbed or adversely impacted. The CGTO is again recommending that funds be provided to tribal governments to provide suitable training and establish emergency response teams and purchase equipment deemed necessary to respond to an emergency. Clearly, tribes will be impacted if a decision is made to transport high-level radioactive waste and spent nuclear fuel through or near their traditional lands. It appears to be highly discriminatory to establish different criteria for tribal governments to receive *affected status* than what is required of county and state governments who provide little or now assistance to tribes.

4.3 TRAINING AND EQUIPMENT

The CGTO recognizes the importance of receiving appropriate training for its members and emergency response teams to adequately respond to and recognize the proper methods for handling accident scenes. The CGTO has requested assistance from the DOE/YMP to provide adequate funding to provide training. Due to the absence of funding and government-to-government assistance, most Indian groups are not prepared nor equipped to adequately respond to unforeseen emergencies.

Most tribal governments do not have the financial resources to support the purchases of emergency equipment and vehicles to meet the standards of most communities or municipalities. Moreover, most tribal governments must rely on government surplus or outdated equipment to fulfill needs to respond to emergencies. The DOE must provide the necessary funding and resources to allow tribes the opportunity to procure necessary equipment.

4.4 CONTRACTS FOR TRIBAL ENTERPRISES / EMPLOYMENT OPPORTUNITIES

The CGTO supports tribal enterprises and recommends that the YMP award contracts to eligible tribal enterprises interested in doing business with the DOE. Standards should be developed to encourage greater preference and consideration for tribal enterprises that have cultural and historic ties to the proposed project area.

The United States Equal Opportunities Commission authorizes and recognizes the establishment of Tribal Employment Rights Offices (TERO) to promote equality for tribal governments and its members to receive federal contracts and employment opportunities resulting from work conducted on or near reservation boundaries. Many of the member tribes of the CGTO have established and successfully managed TERRA FIRMA on their respective reservations for many years. The CGTO recommends that the YMP contact each TERO office and work closely to uphold the mandates of the U.S. Equal Opportunities Commission.

The CGTO recommends that the DOE provide procurement opportunities for any CGTO tribes that are able to offer services during the construction of YMP facilities and the proposed rail system. Many of the CGTO tribes are qualified to provide a variety of services that will be needed directly or indirectly in association with construction of the proposed rail system. Specifically, the CGTO is aware of the Duckwater Shoshone Tribe's capacity to offer construction services as a qualified tribal enterprise. The CGTO is aware that this tribe along with other member tribes have requested that the DOE provide funding to support a full-time tribal employee position to act as a liaison and assist in the monitoring and compliance of the project and to reaffirm government-to-government relations.

4.5 AMERICAN INDIAN TRANSPORTATION ISSUES

American Indian transportation issues were suggested during the Rail EIS scoping period and again raised in the CGTO meetings. Therefore, it is important to include these issues in the EIS. Despite a record of meetings with American Indian people, groups, and tribes, the AIWS believes that studies will not present critical American Indian concerns. These include, among others, the impact of radioactive and hazardous waste travel along rail and highway routes on or near existing and planned American Indian businesses. Of particular concern are the impacts to

the Timbisha Shoshone Tribe, Moapa Paiute Tribe, Las Vegas Paiute Tribe, Paiute Indian Tribe of Utah, and the Duckwater Shoshone Tribe. American Indian people, especially elders, express a fear of radiation as an “angry rock” which can impact people as it travels. These impacts can occur even if the waste remains packaged and no transportation accidents occur to spill the contents of the package. American Indian people have communicated their perception of radiation and the nature and extent of this fear should be addressed in the YMP Rail EIS. American Indian people also express concern that places of spiritual power could be harmed by the transportation or storage of high-level radioactive waste and spent nuclear fuel.

The CGTO recommends that the cultural concerns of other American Indian tribes and organizations should be included in the study of potential impacts of transporting high-level radioactive waste or spent nuclear fuel through culturally sensitive areas.

Under the Shared Use Alternative provisions are made to allow private companies and other organizations to ship commercial commodities on the proposed rail line as described in the Proposed Action. Many tribes situated within close proximity to the proposed rail line may consider the development and/or future expansion of tribal enterprises. Tribes that would benefit from having direct access to the proposed rail line through the construction of a rail spur from tribal lands should be contacted. These opportunities should be considered as additional studies of rail line construction and use are implemented.

Due to the numerous perceived and actual risks associated with the proposed undertaking, the DOE should conduct systematic ethnographic studies and a Perceived Risk Transportation Study similar to what was completed by the NTS. The study conducted by the Bureau of Applied Research in Anthropology from the University of Arizona-Tucson, was designed to record the perceptions of Indian people related to transportation. No such effort has been considered by the YMP. In the event that the DOE conducts these additional studies, special arrangements should be made with the CGTO to assign the American Indian Ethnography Team to evaluate the area and recommend that suitable members from the American Indian Monitoring Team be present during the actual construction phase. During this phase, the DOE should develop, with the assistance of the CGTO, special procedures dealing with the inadvertent discoveries of human remains or other significant cultural items that may be adversely impacted by the construction of the proposed rail corridor.

The CGTO is aware that some tribes have expressed some concerns about the possible deviations to the proposed rail corridor as identified in the YMP EIS. In the event there are any changes that have not been properly evaluated by the CGTO or those tribes situated within close proximity, the DOE must contact all Indian groups with cultural and historical ties while giving serious consideration to any potential concerns of the Indian people. In addition, should waste be transported by heavy-haul truck, or if existing highways will be used, the DOE must contact those tribes with cultural and historic ties situated along selected transportation routes in an effort to uphold a government-to-government relationship.

4.6 AMERICAN INDIAN TRADITIONAL HEALING CEREMONIES/MONITORS

The AIWS recommends that traditional healing ceremonies be conducted as indicated in Sections 2.3.1-2.3.25. Additionally, Indian monitors must be present during all phases of evaluations and construction related to the proposed rail corridor.

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5.0 CONCLUDING REMARKS

5.1 AMERICAN INDIAN CULTURAL RESOURCES

The CGTO recommends that mitigation programs implemented at the YMP fully incorporate the assistance of American Indian people so that adverse impacts on American Indian resources can be efficiently averted. American Indian people know the YMP landscape in great depth and thus can help scientists with the identification of plants, animals, geography, archaeological sites, and Traditional Cultural Properties that have been, or will be adversely impacted by YMP programs and activities.

The CGTO considers that the natural and spiritual balance of the YMP landscape has been profoundly upset by prolonged misuse of the land by the DOE and that the land must be purified and the spirits appeased in order to fully restore the environment to its previous condition. Through ceremonies, prayers, and offerings, American Indian people will contribute to increase the benefits of mitigation and will aid in restoring the spiritual harmony of impacted landscapes.

There are a number of proposed YMP activities that are of great concern to Indian people because of their adverse impact on the American Indian landscape. To avert or mitigate such impacts, the CGTO recommends that the YMP fund systematic American Indian studies to:

- Identify those areas/resources that will be irreparably damaged, as well as areas/resources that can be restored for human use
- Avoid further ground-disturbing activities
- Make mitigation of restorable areas a top priority
- Replace lost plant and animal species integral to the spiritual landscape
- Avert or minimize damage to geological formations important to the spiritual landscape
- Implement environmental restoration techniques that require minimum ground-disturbing activities
- Continue systematic consultation with American Indians so that potentially impacted resources can be identified, alternative solutions discussed, and adverse impacts averted
- Give American Indian people access to adversely impacted areas so that they can contribute their knowledge, purification ceremonies, prayers, and offerings to the restoration of the natural and spiritual harmony of the YMP landscape.

In addition to these recommendations that derive from analysis of potential action and alternative impacts to American Indian cultural resources, the CGTO discussed and agreed to the following issues at meetings with the YMP:

1. Consultation with the CGTO does not relieve the YMP of its obligation to maintain a government-to-government relationship with American Indian tribes.
2. The YMP must continue to consult with all culturally affiliated tribes and organizations belonging to the CGTO.
3. The YMP should incorporate other American Indian tribes and organizations when considering activities away from (i.e. outside the American Indian region of influence) the YMP, such as transportation.
4. The CGTO recommends that the YMP incorporate wherever possible in the Rail EIS, the text from the American Indian Resource Document and the final tribal recommendations to the YMP prepared at related YMP Tribal Update Meetings.
5. The CGTO recommends the continuance and expansion of the American Indian consultation program.
6. The CGTO recommends that they be actively involved in the planning, developing, and monitoring of all future YMP ground-disturbing activities.
7. Public meetings are not the proper way to consult with tribes and organizations; they should not be considered stakeholders as defined by the DOE.
8. All Indian spiritual leaders and other involved Indian people should be afforded the opportunity to conduct land restoration ceremonies.
9. Access to culturally sensitive areas should be provided to the CGTO and limited to others.
10. Provisions for American Indian monitors needed for cultural resources investigations should be incorporated.

5.2 NATIVE AMERICAN PERCEPTIONS OF DOE ACTIVITIES

Perceptions of the effects of DOE activities are well known among the Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shoshone people of this region. A Native American states:

“These perceptions of risks are frightening, and remain an important part of our lives. We will always carry these thoughts with us. Today, people are afraid of many things and places in this whole area, but we still love to come out and see our land. We worry about more destruction being brought to this land. If the YMP wants to better understand our feelings about the impacts of their activities on our cultures, they should support expanded ethnographic studies designed, conducted and produced by the CGTO. At this time there has been limited studies of American Indians perceptions of risk. Therefore, it is not possible to provide action-by-action estimation of risk perception impacts. We believe it is a topic that urgently needs to be studied so that Indian people may better address the actual cultural impacts of YMP activities. There have been recent workshops funded by the National Science Foundation to understand how to research the special issue of culturally

based risk perception among American Indian communities, and at least one major project has been funded. Although this is a relatively new topic of research, it is one that can be more fully understood by research that deeply involves the people being considered. To understand our view of radiation is to begin to understand why we responded in certain ways to past and present activities, and why we will continue to respond to future YMP activities.”

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