TRIBAL CONCERNS ABOUT THE YUCCA MOUNTAIN REPOSITORY: AN ETHNOGRAPHIC INVESTIGATION OF THE MOAPA BAND OF PAIUTES AND THE LAS VEGAS PAIUTE COLONY

Prepared for the
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1.0 INTRODUCTION

The purpose of this report is to identify and document the potential impacts to Native American ethnic groups resulting from the proposed deep geologic repository for high-level nuclear waste at Yucca Mountain, Nevada. Under the Nuclear Waste Policy Act of 1982 (PL 97-425) as Amended 1987 (PL 100-203), Clark County is authorized to conduct oversight of the Department of Energy's (DOE) site characterization activities at Yucca Mountain, report on potential impacts from the transportation of nuclear waste to Yucca Mountain, and monitor impacts of actual operation of a proposed repository at Yucca Mountain. The proposed Yucca Mountain site is in the Southern Great Basin approximately 100 miles northwest of Las Vegas, and is located within an area of both prehistoric and historic joint use by both Southern Paiute and Western Shoshone people who have strong cultural ties to the region.

Native American culture of the Great Basin continues to persist in spite of increasing social, economic and technological changes that have taken place over the past 160 years. Our focus is to understand the Native American landscape and how tribes respond to the increasing changes affecting tribal life-ways and how these life-ways will be impacted because of the repository program.

Identifying potential threats and changes that may impact tribal life-ways can enhance development planning and program deployment by placing information in a context of historic and present tribal values for decision making. Full participation by tribes in the interpretation and analysis of information can provide policy makers with a culturally appropriate context with which to identify and view possible impacts, identify alternatives in present and future planning and program development, implementation and decision-making. The objective of this study is to provide documentation of tribal concerns. This documentation will help preserve tribal

knowledge and place it within a recognized community context. Such documentation of impacts will aid future planning with respect to the potential adverse impacts from the proposed repository siting, operation and transportation on and affecting Indian lands.

1.1 Approach to Tribal Concerns

The psychometric paradigm encompasses a theoretical framework that assumes risk is subjectively defined by individuals who may be influenced by a wide array of psychological, social, institutional, and cultural factors (Slovic 1992). According to Slovic, with the appropriate design of survey instruments, many of these factors and their interrelationships can be quantified and modeled in order to illuminate responses of individuals to the hazards that confront them. This is one approach that will help us understand how risk is perceived and the levels of concerns that nuclear waste engenders in a group. However, Native American tribes inhabit the Great Basin and face impacts that may threaten tribal life-ways in unknown ways that affect the tribe uniquely. Viewing the "tribal landscape" as a seamless landscape overlaid with thousands of years of custom, tradition, culture, and society can provide important information on impacts that can guard tribal communities from potential impacts of the repository. This study integrates the two approaches through a focus on how nuclear waste risks are perceived, the level of concern about them, and how these risks can impact a tribe's life-ways from the perspective of tribal members.

One approach to documenting tribal knowledge and baseline conditions is for the tribe to conduct impact assessments from within the tribe. Typically, this is not feasible for Indian communities chronically exposed to low doses of radiation for 40 years. Native American communities have carried a disproportionate burden of risk, and have had little access to professional and financial resources, expertise, and health effects information. Available

information of the exposure of Native Americans is inadequate, incomplete, inaccessible, and incomprehensible (Quigley, et al. 2000).

Another approach is to use hermeneutical interpretation. This approach provides an understanding of potential impacts that uniquely affect tribal communities and provide broader representation of tribal interests, define baseline conditions, and fill in gaps in the data for evaluation of potential damage or loss. Hermeneutical interpretation can provide reliable response interpretation and "reporting of meaning" from in-depth interviews conducted in the lived rich contextual world of tribal community (Kvale 1996). The approach involves oral discourse placed into test and its subsequent interpretation. This approach is useful for providing an understanding of impacts that uniquely affect tribal community in cultural, spiritual and land use in relation to the proposed Yucca Mountain repository and transportation system.

This report presents the Native American landscape and tribal concerns for both the Southern Paiute and Western Shoshone tribes as a culturally appropriate backdrop against which to view current development of the proposed repository at Yucca Mountain. Documenting tribal landscapes is useful for identifying historic tribal life-ways overlaid with the adoption of tribal constitutions and the imposition of myriad federal regulations now controlling contemporary tribal life. Although both southern Pauite and Western Shoshone tribes are highlighted, it is the two southern Pauite tribes located in Clark County that will be the focus of the impacts through in-depth interviews. However, it is important to provide the larger historical tribal context in its relationship to nuclear development as well.

Native Americans view of the natural environment is different than mainstream America.

Community risk is determined by a set of heuristics (Tversky and Kahneman 1974) and is sought

as evidence to document tribal perspectives as a determinant of environmental integrity against the threats posed to Native American life-ways by nuclear development.

1.2 <u>Interviews</u>

Interviews were conducted at the Las Vegas Paiute Colony and with the Moapa Band of Southern Pauites during the winter of 2001-2002. Ten respondents were selected for interviews from the tribal members in each community. In each community an effort was made to find a diversity of respondents representing the entire community's perspective. Questions were specifically designed to ascertain baseline living conditions, non-nuclear concerns, experience with things nuclear, and concerns about possible nuclear waste shipments through or near the two tribes. Questions were also asked about the tribes' view of high-level nuclear waste based on the three transportation scenarios used in other socioeconomic studies by Clark County as a base from which to project future impacts. The greatest emphasis was placed on obtaining a community perspective, but it should be recognized that as each of the two communities are small, respondents may have served on the tribal council for their respective community.

The respondents were chosen to closely represent the distribution between males and females. Also, in part the respondents were selected for their diversity of age and employment. Many of the individuals have held various positions as employees of the tribe, as well as, being employed by non-Indian employers in the region. The employment situation in both communities is not well represented by the employment of the respondents because unemployment on the Moapa Paiute Indian Reservation is high and most tribal members of the Las Vegas Paiute Colony receive tribal revenue checks and do not choose to work. Both Elders and youth were sought for interviews to provide a broad sweep of intergenerational concerns and

responses. The following list identifies the individuals interviewed, their age and employment situation at the time of the interviews. Tables 1 and 2 identify interviewees by name, age and occupation.

TABLE 1 LAS VEGAS PAIUTE TRIBAL MEMBERS INTERVIEWED Las Vegas Paiute Tribe				
Norman Harris	36	Former Tribal Police		
Marie Wilson	64	Tribal Elder		
Chris Phebus	33	Casino worker		
Gloria Shearer	65	Tribal Elder		
Atef Elzeftawy		Associate to tribal council (non-Paiute)		
Kenny Anderson	45	Director, tribal environmental program		
Lawanda Estonia	38	Tribal healthcare worker		
Darla Shearer	34	Unemployed		
Danny Turrietta	19	Student/unemployed		
Jack Shearer	37	Seasonal railroad supply worker		

TABLE 2 MOAPA BAND OF PAIUTE TRIBAL MEMBERS INTERVIEWED				
Moapa Band of Paiute				
Name	Age	Occupation		
Vernon Lee	50	Heavy equipment operator		
Phil Swain	57	Tribal Chairman		
Lalovi Miller	65	Tribal Elder		
Robert Tom	47	Director Boys and Girls Club		
Juanita Kinlichni	78	Tribal Elder		
Evelyn Samalar	85	Tribal Elder		
Eunice Ohte	58	Daycare worker		
Jody Lee	34	Casino floor person		
Amber Simmons	21	Student/unemployed		
Calvin Meyers	47	Former Director Tribal Environmental Programs		

The information taken from the interviews was developed along two lines. The first addressed the repository's impacts on culture, religion and land. Appropriate quotes were taken

from the interviews to reinforce and validate the identified impacts. It is important to recognize that the identified concerns reflect tribal perspectives after significant time was spent with each interviewee to gain their confidence and trust. The notion of "impacts" is a language and cultural issue and careful thought was given on how to develop the questions in order to gain the tribal perspective. It was also important that the interviewer not provide new information on the topic in order to ensure objectivity.

The second line of enquiry asked the respondents about potential impacts to their life-ways and economic development based on three transportation risk scenarios. The details of the scenarios and responses are reported later in this report in a section on responses to the scenarios. The use of the three scenarios in this study was done to ensure—consistency between this study and the other impact assessments completed for Clark County, Nevada that utilized the scenario methodology.

2.0 HISTORICAL TRIBAL CONTEXT

The Native American landscape has changed dramatically, but much of the traditional knowledge is still kept by Native American people who continue to regularly practice their religion and culture throughout their aboriginal territory including regions experiencing increasing development. Early exploration of the Great Basin provided "natural history" information of various Numic groups with no concentration on anthropology until the 1880's (Fowler1980). Pressure from an American appetite for land focused west to the Great Basin with a national rhetoric of "manifest destiny", an illusion of entitlement to Native American homelands in the west. After the 1848 treaty with Mexico, and with little regard for Native American tribes, America expanded its borders to the Pacific Ocean and only later sought to justify these land claims.

The Southern Paiute and Western Shoshone people have not suffered as much as other tribes from U.S. federal Indian policies. However, earlier Spanish incursions did affect tribal development for both peoples. On-going developments, deteriorating environmental conditions, deliberate indifference, and marginalization exist and influenced tribal growth and development. While the Southern Paiute landscape has changed they continue to regularly practice their religion and culture throughout their aboriginal territory that includes the region around Yucca Mountain, and in tribal areas within Clark County. Isabelle T. Kelly produced an early ethnographic mapping of the extent of Southern Paiute aboriginal territory in the 1840's in 1934.

The Western Shoshone National Council, traditional government of the Western Shoshone Nation is the only known tribal group in the Great Basin functioning on the scale of a nation. There is disagreement by federal agencies as to the legitimacy of the Western Shoshone National Council (WSNC) to act as a formal nation. However, the Western Shoshone National Council maintains it is the legitimate successor to the rights, duties and obligations contracted with, and by the 1863 Treaty of Ruby Valley. First organized in January 1984, the WSNC has assumed the mantle of sovereignty on behalf of the Western Shoshone people and continues to exercise powers of self-governance including the adoption of a Charter of Self-Governance, an Organizational Statement, the adoption of WSNC decisions by consensus decision making in the passage of resolutions, regular monthly meetings at the proclaimed capitol in the town of Austin and the creation of Western Shoshone passports for identification and international travel. Participation in international forums and conferences at the United Nations and the European Parliament demonstrate the customs governing political relations between the government of the Western Shoshone Nation and the world community.

Growth and development required of Native Americans is based on a grant of rights to the U.S. by treaty or tolerance of U.S. occupancy. Unfortunately, increasing occupancy by Americans typically exceeded the carrying capacity of land for peoples practicing traditional tribal life-ways. Impacts to tribal self-sufficiency affect the tribe as a nation.

U.S. reforms that were intended to benefit Native Americans resulted instead in further occupancy and dispossession of Native American lands. One case closely examined by Elmer Russo, Professor of Political Science at the University of Nevada Reno, is the on-going dispute between the Western Shoshone Nation and the U.S. Professor Russo explains:

"Since federal Indian Law requires that abolition of Indian occupancy rights must take place by clear and explicit actions, it cannot be maintained that the Ruby Valley Treaty abolishes these rights in the case of the Western Shoshone. The Indian Claims Commission decided in 1962, on the contrary, that at some time after the ratification of the treaty, Western Shoshone land was lost by "gradual encroachment" of settlers and others. According to the commission, the federal government was involved only in supporting, and later validating, these seizures of Shoshone land. Essentially the same pattern resulted in the loss of lands belonging to the Northern Paiutes and Washes, although in these cases no treaties existed. 16 American Indian Quarterly 337, (1992)"

A full examination of the Indian Claims Commission (ICC) case for the Southern Paiute, Mohave and Chemehuevi may reveal similar reasoning and implications for Southern Paiute people. Southern Paiute and Western Shoshone lands pre-historically overlapped. No distinct border existed and today people of both tribes recognize approximately 2 million acres of joint-use area that includes the Yucca Mountain Region.

The ethnographic mapping of the Southern Paiute aboriginal territory during the 1840's was produced in 1934 by Isabelle T. Kelly. This mapping depicted the extent of the Southern Paiute ethnic bands, including both Mohave and Chemehuevi. The ICC differentiated between the Mohave, Chemehuevi and Southern Paiute establishing separate land claims for each. By design or by necessity each was determined to be a separate tribe and today are federally

recognized as different self-governing political entities identifying tribal membership and administration of programs and contracting with the federal government to meet the needs of each community.

The Las Vegas Paiute Tribe and the Moapa Band of Paiutes are of Southern Paiute ethnic origin and possess ties to the proposed repository site and are focused on in this investigation. Documentation of contemporary social, political and economic conditions of the Southern Paiute can differentiate between the Moapa Band of Paiute and the Las Vegas Paiute Tribe based upon tribal membership and political affiliation in each community. Tribal membership is an important distinction that signifies right and authority of the individual to live in a community, participate in social and cultural activities of that community, and share in the benefits that accrue to the tribe including tribal knowledge such as songs, "power" or "medicine", and other physical resources such as revenue from tribal businesses.

Viewing the Paiute landscape from a tribal perspective is necessary to identify and document potential impacts that uniquely affect tribal community as a result of the repository program. Marth Knack, recognizes Paiute landscapes as distinct and distinguishable from the invasive historical activities of Mormons in Utah seeking sustainable communities based on agriculture requiring land and water resources of the Paiutes; miners in Nevada seeking to get rich after digging up Paiute land and everything that lay beneath; and cattlemen of northern Arizona and extreme southeastern Utah seeking grassland and water for cattle herds. "Each wanted to remove for its own profit some specific but different resource from the Paiute landscape." (Knack 2000)

2.1 <u>International Law, U.S. Law and Regulation</u>

Isolated and without horses, the Southern Paiute were not deemed worth the trouble of Spanish explorers searching for an inland trade route between the Pacific missions and missionaries setting seeking to convert the Native Americans to Christianity. The Spanish, who claimed the southern Great Basin through the Doctrine of Discovery, left the Southern Paiute homelands intact. The Doctrine of Discovery was the basis under which Western European powers claimed ownership of Native American lands "notwithstanding the occupancy of natives and at the same time admitting the prior title of any Christian people who may have made a previous discovery" (Marshall 1823). Ownership of Southern Paiute territory was undisputed by Euro-American standard practice in developing International Law and on February 2, 1848

Mexico and the U.S. entered into the Treaty of Guadalupe Hidalgo (9 Stat.922) transferring ownership to the Great Basin from Mexico to the U.S. subject to the continuing use and occupancy of the Native Americans. The treaty of 1848 specifically precluded the dispossession of the Native Americans of their property to prevent immigration of landless refugee Indians to Mexico.

And, finally, the sacredness of this obligation shall never be lost sight of by the said Government, when providing for the removal of the Indians from any portion of the said territories, or for its being settled by citizens of the United States; but, on the contrary, special care shall then be taken not to place its Indian occupants under the necessity of seeking new homes, by committing those invasions which the United States have solemnly obliged themselves to restrain. (Article XI)

Native Americans shaped International Law by warfare and at times, as in the case of the Southern Paiute Tribe and the Western Shoshone Nation, by their mere existence. As U.S. domestic law evolved, the courts recognized the special status for Native Americans as "wards" and as "dependent domestic nations" (Marshall, 1831) holding rights of possession and usage to

their lands. The U.S. expanded its borders west to the Pacific Ocean and sought to make lawful the acquisition of Native American lands occupies in its expansion.

In 1946 the U.S. created the Indian Claims Commission (ICC) to settle with "finality" all Native American land rights claims to lands taken by the U.S. Another feature of the ICC was that while lands that may have been taken by American settlers, miners and military occupation, no land was to be returned. This provision provided an incentive for lawyers to push forward with a claim on behalf of a tribe until the ICC finalized an award payment. Lawyers were to be paid 10 percent of any claim award made on behalf of a tribal claimant. Additionally, what land was actually taken, or occupied by the U.S. or its citizens, was much less than the lands ICC lawyers sought compensation for on behalf of their Native American claimants. In 1951 the Southern Paiute filed a claim for lands taken by the U.S. The Southern Paiute claim under dockets 88, 330 and 330-A (accounting) was affirmed in 1965 (14 ICC 618). The final award was distributed in 1970, and the \$7.25 million dollars amounted to approximately 28 cents per acre. The Moapa Band of Pauites was able to have some of their original land given back to them by the U.S. Bureau of Land Management in the 1980s.

Recent arrivals to these lands included the Bureau of Reclamation, builders of Boulder

Dam; the Department of Defense operating the Nellis Bombing and Gunnery Range; the

Department of Energy operating the Nevada Test Site and characterizing the proposed Yucca

Mountain repository; and the Department of Interior, managing both public lands and national

parks. All federal agencies have an obligation known as the "trust responsibility" in the

adherence of government-to-government relations with Native American tribal governments.

The federal trust responsibility arises from treaties, statutes and executive orders, and the historic relations between tribes and America. The term "trust responsibility" is also used in a narrower

sense to define the precise legal duties of the U.S. in managing property and resources of Indian tribes and, at times, of individual Indians (DOJ).

Associated with federal agencies is legislation intended to provide for protection of Native American interests: the Native American Religious Freedom Act (PL 95-341), the Antiquities Act (PL 209), Archeological Resources Protection Act (PL 96-95), Historic Sites Act (16 USC §§ 461-467), National Historic Preservation Act (PL 89-665), National Environmental Policy Act (PL 91-190), Native American Graves Protection and Repatriation Act (PL 101-601), Environmental Justice Policy (E.O. 12898), Protection and Enhancement of the Cultural Environment (E.O. 11593), Indian Sacred Sites (E.O. 13007). Each of these laws direct federal agencies to consult with federally recognized tribes. However, many federal agencies focus almost exclusively upon a tribe's cultural resources or religious beliefs representing these as the only legitimate existing interests to be considered for protection. The focus on cultural resources or spiritual belief leaves little room for other existing rights and interests of the tribe to be considered, and this myopia manifests itself in the Yucca Mountain controversy and claims made by Native Americans.

2.2 <u>Native American Organization</u>

Native American tribal organization pre-existed the U.S. and operated outside of the boundaries of American governmental structures set by Constitutional authority. Tribes have been recognized as "distinct, independent, political communities," governing by power of self-government by reason of their original sovereignty that has never been extinguished (Cohen, 1942). The Great Basin is home to four Native American ethnic groups: The Northern Paiute, Washoe, Southern Paiute and Western Shoshone. The Southern Paiute people also occupy the

southeast Colorado Plateau in Utah. Confusion over the ethnic affiliation of the Chemehuevi and Mohave to the Southern Paiute people is still being debated today.

Subgroups of the larger ethnic tribes are distinguished by the U.S. Department of the Interior under the Indian Reorganization Act (IRA) of 1934, popularly known as the Wheeler-Howard Act (P.L. 48 Statute 984). An identifiable Native American ethnic group may petition the Secretary of the Interior to become a "federally recognized" tribe under Title 25 of the United States Code and adopt a constitution for the tribe with approval by the Secretary of the Interior. In Nevada there are 24 quasi-sovereign autonomous governing tribes having political relations with the U.S. federal government. Many Native American tribes benefit from their special status as Indian tribes based upon treaties, historic relations with the U.S. and sovereignty that defines the status of otherwise obscure Native American tribal entities. Most, if not all, tribes would today be extinct if not for the on-going support received from the federal government.

Another feature of the federal government's support for Native American tribes is the determination of ethnic identity as a member of a tribe based upon "blood quantum." Ranging from one-half, one-quarter, one-eight and one-sixteenth degree blood quantum, the process is one that originated during a time in America's history when racial discrimination was ripe, assimilation and "civilization" of the Indians a societal goal. The requirement for tribes to maintain a system of ethnic identification was later removed by the Secretary of Interior, but the policy of limiting the burden of providing basic services to the tribe by the U.S. is still linked today on service levels tied originally to blood quantum determinations.

Tribes, not otherwise federally recognized, are not considered for notification of special programs, threats to tribal life-ways, dialogue or consultation in projects that may impact them, or participation in needful programs. One example is the Paiute people of Pahrump. Since the

Pahrump Paiute have not sought federal recognition and are not a federally recognized tribe, they lack standing to participate in numerous programs or take advantage of laws intended for tribal development and protection. Another example is the Western Shoshone Nation that occupies a large territory including a portion of Clark County. Their unique status and relationship to the federal government creates at times a difficult situation for not only the Western Shoshone, but also many Native American tribes that are willing to participate in projects that affect their tribal community. Sometimes culturally appropriate opportunities are not available through statute, legislation or programs intended to assess broader socioeconomic impacts for a given project. Consequently, opportunities for tribal participation are ignored and lost. This issue is important when considering the full array of impacts of the nuclear waste repository.

3.0 HISTORY OF TRIBAL RESPONSE TO NUCLEAR WASTE

For many Native American communities, the DOE programs are not well understood. The DOE, successor to the Atomic Energy Commission, is a new agency to many Native American tribes and it has an obscure origin and unknown mission. From its origins in a culture of secrecy, the DOE was unsuccessful in reaching out to Native American communities. For many tribes with ties to the Yucca Mountain Region, the first contact and knowledge of the proposed Yucca Mountain site was the result of contacts by cultural resource consultants contracted by the DOE. For most tribes, this *contact* for "cultural resource consultation" was both the beginning of, and full extent of tribal involvement. The DOE generally failed to approach Native American tribes on a government-to-government basis that is the stated U.S. policy for relations with Native American tribes.

The NWPA of 1982 contains several provisions for the identification, notification and participation of Native American tribes in the site characterization and disposal of nuclear waste

at a proposed geologic repository. Among these, the designation of "affected Indian Tribe" status. According to the definition used in the Act (Sec. 2., 42 U.S.C. 10101) an "affected Indian Tribe" is:

- (A) Within whose reservation boundaries a monitored retrievable storage facility, test and evaluation facility, or a repository for high-level radioactive waste or spent fuel is proposed to be located; and
- (B) Whose federally defined possessory or usage rights to other lands outside of the reservation s boundaries arising out of congressionally ratified treaties may be substantially and adversely affected by the locating of such a facility: Provided, that the Secretary of the Interior finds, upon the petition of the appropriate governmental officials of the tribe, that such effects are both substantial and adverse to the tribe.

Prior to passage of the Nuclear Waste Policy Act and Amendment of 1987, 21 sites for the repository were considered. These were winnowed down to 9 and then down to 3 that included Hanford Washington, Deaf Smith County Texas, and Yucca Mountain. Three tribes, the Umatilla, Yakima and the Nez Percz at the Hanford site were formally designated as "affected Indian Tribes." This designation became moot when Yucca Mountain was designated as the sole site for investigation by the 1987 Amendment of the NWPA.

Two concerned Western Shoshone communities aware of the proposed repository prepared petitions in 2000. Both the Duckwater Shoshone Tribe and the Timbisha Shoshone Tribe, sought designation by the Secretary of the Interior as an "affected Indian Tribe." No response to either tribe's petition has been made. These tribes are without the resources to further their petitions administratively or through litigation. Both the Duckwater Shoshone Tribe and the Timbisha Shoshone Tribe meet the threshold criteria of the NWPA of 1982. The failure of the Secretary of the Interior to respond to the tribal petitions also may constitute violation of environmental justice principles.

The DOE or the Department of Interior formally notified none of the 24 federally recognized tribes of the proposed repository project. As mentioned previously, the only opportunity or notification provided came from cultural resource consultants for the DOE. DOE consultants originally focused on 17 "historic Indian tribes" and later expanded to 20 that include (DOE/NV-10576-21):

- 1. Benton Paiute Reservation
- 2. Timbisha Shoshone Reservation
- 3. Biship Paiute Shoshone Reservation
- 4. Big Pine Paiute Shoshone Reservation
- 5. Fort Independence Reservation
- 6. Lone Pine Paiute Reservation
- 7. Yomba Reservation
- 8. Duckwater
- 9. Pahrump Paiute Tribe
- 10. Las Vegas Indian Colony
- 11. Las Vegas Indian Center
- 12. Chemehuevi Reservation
- 13. Colorado River Reservation
- 14. Moapa River
- 15. Shivwits
- 16. Cedar City
- 17. Indian Peaks
- 18. Kanosh

19. Koosharem

20. Kaibab Paiute Reservation

The Western Shoshone National Council with its self-determined organization, treaty and outspoken criticism of the proposed repository project was not included in the DOE cultural resource study. Two groups that were identified by the DOE cultural resource consultant as historic Indian tribes without federal recognition are the Pahrump Paiute Tribe and the Las Vegas Center. According to a report published by the State of Nevada Agency for Nuclear Projects/Nuclear Waste Project Office on research taken between 1987-1991(Fowler 1991):

The rural, informally organized Pahrump Band, currently not federally recognized, has no legal status as a tribal government.

Then there is the Las Vegas Indian Center. Again, according to the State of Nevada Agency for Nuclear Projects/Nuclear Waste Project Office on the same research:

By 1990, the Native American population figures had risen to 6,416 in the county...Although tribal identifications are difficult to impossible to obtain from the U.S. Census data, the Las Vegas Indian Center, which serves on a drop in basis, an estimated 10-15% of this population, does keep track of tribal affiliation. According to their data for 1989-1990 fiscal year, roughly 25% of their clients and visitors were Navajo people, 10% were Sioux, 8% were Paiute, 5% were Cherokee, and 3% each were Shoshone and Chippewa. The remainder was made up to 1 to 10 persons representing 62 different tribes, a true cross-section of Native American affiliations. Only 38% of the households served had a permanent residence, with 56% being reported as homeless (Fowler 1991, pp.75)

All Native American tribes across the continental U.S. were formally contacted to solicit interest in becoming host for a Monitored Retrievable Storage (MRS) site after passage of the NWPA Amendment in 1987 designating Yucca Mountain as the sole site for investigation as a potential high level nuclear waste repository and the adoption steps for the MRS approach. Initially 20 tribes responded to the MRS proposal and received grants of \$100,000 to study the proposal. In Nevada, the Fort McDermitt Shoshone Paiute Tribe on the Nevada-Oregon border

considered the proposal but later rejected it owing to incongruity of nuclear waste storage with tribal tradition.

The Mescalero Apache tribe spent several years considering the MRS until internal opposition quashed further consideration of the proposal. No MRS alternative has proved successful. There is no longer a MRS program, however one tribe, the Skull Valley Goshute Tribe, is currently engaged with a consortium of nuclear utilities pursuing what is termed the Private Fuel Storage (PFS) facility. The PFS facility is patterned after the proposed MRS facility to privately locate high-level nuclear waste at a site on the Skull Valley Goshute Reservation in western Utah. Tribal members with traditional Native American values are vigorously engaged in fighting against PFS on the reservation and have sought help from anti-nuclear activists and the State of Utah, who are also opposed to the plan.

Between 1987 and 1995, two tribes received funding from the State of Nevada for their involvement in directing socio-economic studies conducted by the State. The WSNC and the Moapa Band of Paiutes both participated in the State, Tribal, and Local Government Steering Committee (STLGSC). Involvement in the STLGSC provided state researchers with tribal perspectives and gave tribal participants with regular information and updates on repository investigations. State funding was subsequently cut by Congress and the tribes were unable to sustain participation in the STLGSC owing to what for the tribes are substantial opportunity costs associated with their involvement. Currently there are no opportunities for substantial tribal participation other than in the event of a cultural find at the Yucca Mountain site as part of the DOE cultural resource program. Participation is then limited by the DOE's approach to consultation developed for cultural resource site investigation rather than government-to-government relations, the stated policy of the United States.

Native American tribal concerns over the proposed repository have been limited by time, distance and cost. Many Native American communities are aware of the proposed Yucca Mountain repository and have concerns, but they lack institutional capacity necessary to overcome opportunity costs necessary for full participation in the repository siting process. Recent data collected during the summer of 2001 by the State of Nevada update tribal concerns for 12 Native American political entities (Agency for Nuclear Projects 2002). Tribal concerns include direct impacts, indirect impacts, ongoing impacts, and potential future impacts to tribal life-ways both on and off the reservation or within treaty guaranteed lands. These twelve tribes include:

- 1. The Las Vegas Paiute Tribe;
- 2. The Moapa Band of Paiutes;
- The Western Shoshone National Council, traditional tribal government of the Western Shoshone Nation;
- 4. The Timbisha Shoshone Tribe;
- 5. The Te-Moak Tribe of Western Shoshone Indians;
- 6. The Battle Mountain Band Colony;
- 7. The Elko Band Colony;
- 8. The Wells Band Colony,
- 9. The South Fork Indian Reservation;
- 10. The Yomba Shoshone Tribe;
- 11. The Duckwater Shoshone Tribe;
- 12. The Ely Shoshone Tribe.

The Las Vegas Paiute Tribe and the Moapa Band of Paiute will be the subject of specific focus in the next section of this report and will not be included with other tribal concerns identified in this section. Additionally, Northern Paiute people are expected to experience potential impacts from the transportation of nuclear waste across Interstate-80 and the Southern Pacific Railroad corridor. The concerns identified by the twelve tribes are found in A Mountain of Trouble: A Nation at Risk (Agency for Nuclear Projects 2002)

Concerns of the Western Shoshone National Council include:

- Violation of Western Shoshone territorial sovereignty from trespass by the DOE in development of Yucca Mountain as a high-level radioactive waste site;
- Disruption of foreign relations with the Western Shoshone Nation results when treaty protocol pursuant to the Treaty of Ruby Valley are not followed by the US;
- Environmental racism results by the effort of the US to bring commercial nuclear reactor waste to Newe Sogobia, targeting the Western Shoshone people's land;
- The DOE effort to site a repository at Yucca Mountain takes land and cultural resources out of use by the Western Shoshone people;
- Impact of diminished capacity in self-government results from the deployment of limited human and technical resources from normal day-to-day affairs to unfunded monitoring and response to DOE characterization and licensing activity.
- Cumulative impacts result from additional burdens created when Western Shoshone
 land use is further reduced, plant resources are diminished, non-Native American
 presence increases and additional Western Shoshone cultural resources are disturbed
 or removed. The identity of the Western Shoshone people is the land;

Additional impacts result when culturally appropriate mitigation is not taken or
positive benefit is not paid to the Western Shoshone.

Concerns identified by the Ely Shoshone tribe include activities associated with proposed repository operation and transportation including:

- Impacts to lands held in trust for the tribe that may be damaged by transportation accident or an accident at the proposed Yucca Mountain site;
- Impacts to land outside the reservation boundaries arising from a congressionally ratified treaty may be damaged by transportation accident or an accident at the proposed Yucca Mountain site;
- Impact to extant cultural relationship to land outside of the reservation boundaries
 that may be removed from use and access by transportation accident or accident at the
 proposed Yucca Mountain site;
- Impacts to tribal fiscal balances from the need to review and respond to DOE documents without additional funding;
- Impacts to sustainable tribal economic development may result from stigma related to the designation of transportation route through the reservation;
- Impacts to quality of life factors that make the community vulnerable to transportation accidents;
- Impacts to services such as law enforcement from the lack of training or emergency preparedness equipment;

Concerns of the Duckwater Shoshone Tribe include:

• Impacts to self-governance and tribal administration of the Duckwater Shoshone

Tribe from failure of institutional capacity to deal with repository related demands;

- Impacts to the government-to-government relationship between the tribe and the federal government being further strained over conflict in ownership of the Yucca Mountain site;
- Impacts to lands held in trust for the Duckwater Shoshone Tribe that may be damaged or made uninhabitable by a transportation accident or an accident at the proposed
 Yucca Mountain site;
- Impacts to access of land outside of reservation boundaries which are secured to under the 1863 Treaty of Ruby Valley that may be damaged or otherwise removed from use by tribal members by radioactive contamination;
- Impacts to the tribe's cultural relationship to lands outside of the reservations boundaries that may be removed from tribal use and access by transportation route designation and construction;
- Impacts to tribal fiscal balances by the need to respond to DOE documents, reports and participation in licensing proceedings without additional funding;
- Impacts to water resources from potential radioactive releases;
- Impacts to potentially returning tribal members from fears of nuclear waste transportation accidents or accidents at the proposed Yucca Mountain site;
- Impacts to sustainable tribal economic development, future economic development opportunities, reservation expansion, and future grazing rights obtained with land from accidental radioactive release in transportation to the proposed repository or at the proposed Yucca Mountain site;

Concerns of the Yomba Shoshone Tribe include:

- Loss of use and access to lands outside of the reservation boundary by the DOE
 withdrawal for the proposed repository at Yucca Mountain for use as a rail corridor
 on treaty lands of the tribe;
- Damage to animal habitat from construction of a transportation corridor near the reservation on treaty lands or by an accident in transportation to or at the proposed repository site;
- Damage to resources used by tribal members such as wood, grasses, pinion nuts,
 plant for food and medicinal uses by radiation exposure;
- Damage to the health of tribal members from possible exposure to radiation through exposure pathways unique to tribal lifestyle from an accidental release in transportation or at the proposed Yucca Mountain site;
- Damage to grazing range utilized by the tribe's cattle operation resulting in damage to the ranching economy of the tribe;

Concerns for the Te-Moak Tribe of Western Shoshone Indians include:

- Impacts to the Te-Moak Tribe of Western Shoshone Indians fiscal administration of grants and services from insufficient institutional capacity to respond to repository related demands;
- Impacts to self-governance from migration of population away from possible transportation route resulting in lower population base to justify required services;
- Impact related to stigma of of-reservation population unwilling to relocate to tribal lands;

Concerns of the Battle Mountain Band of the Te-Moak Tribe of Western Shoshone Indians include:

- Economic impact may result from designation of Interstate 80 or the Union
 Pacific/Southern Pacific Railroad as transportation corridor producing a migration
 away from the city of Battle Mountain and the Battle Mountain Colony;
- Loss of tribal budget funding from the migration of tribal members away from the Battle Mountain Colony resulting in lower population base to justify services;
- Involuntary risks to the Battle Mountain Band population from a radiological accident in transportation of nuclear waste by highway or rail.

Concerns of the Elko Band of the Te-Moak Tribe of Western Shoshone Indians are:

- Traditional life-ways may be interrupted by the removal of aboriginal territory from use by tribal members;
- Removal of aboriginal territory from traditional use by in-transit accidents or onsite accidents resulting in radioactive release at Yucca Mountain;
- Stigma affecting community confidence in environment resulting in migration out of community;
- Impact to trust in tribal government relations with the US;
- Environmental effects such as contamination to traditional food sources;
- Human health effects from radioactive contamination that may disproportionately affect the tribe;
- Loss of confidence by off-reservation tribal members fearing return to tribal community;
- Loss in confidence by community members in the environment's ability to sustain the needs of the people;

 Adverse health effects from exposure to radiation through exposure pathways unique to Native Americans lifestyle.

Concerns of the South Fork Band of the Te-Moak Tribe of Western Shoshone Indians are:

- Impact from transportation accident could result in release of radiation and produce fear in the community;
- Lack of institutional capacity may strain tribal resources;
- Damage to animal habitat including migratory game birds and wild horses from construction of a transportation corridor near the reservation, within the tribes treaty lands, or by an accident in transportation to or at the proposed repository site;
- Damage to resources used by tribal members such as wood, grasses, pinion nuts,
 plant for food and medicinal uses by radiation exposure;
- Damage to the health of tribal members from possible exposure to radiation through exposure pathways unique to tribal lifestyle from an accidental release in transportation or at the proposed Yucca Mountain site;
- Damage to grazing range utilized by the tribe's cattle operation resulting in damage to the ranching economy of the tribe;

Concerns of the Wells Band of the Te-Moak Tribe of Western Shoshone Indians include:

- Economic impact may result from designation of Interstate 80 or the Union
 Pacific/Southern Pacific Railroad as transportation corridor producing migration
 away from the city of Wells and the Wells Colony;
- Loss of tribal budget funding from the migration of tribal members away from the
 Wells Colony resulting in lower population base to justify services;

- Involuntary risks to the Wells Colony population from radiological accident in transportation of nuclear waste by highway or rail.
- Environmental effects such as contamination to traditional food sources;
- Human health effects from radioactive contamination that may disproportionately affect the tribe;
- Loss in confidence by community members in the environment's ability to sustain the needs of the people;
- Adverse health effects from exposure to radiation through exposure pathways unique to Native Americans lifestyle.

Concerns of the Timbisha Shoshone Tribe are:

- Impacts to self-governance of the Timbisha Shoshone Tribe;
- Strain in government –to –government relationship between the tribe and federal government;
- Impacts to lands held in trust for the tribe;
- Impacts to fiscal imbalances.
- Contamination of water resources from potential radioactive release;
- Impact to sustainable tribal economic development related to perception of stigma;
- Impacts of infrastructure such as roads and power lines and to emergency response in case of accident on the reservation or within tribal emergency response area
- No role in repository planning, emergency response planning that is essential to promote confidence in the Yucca Mountain site

4.0 THE MOAPA BAND OF PAIUTES

The Moapa Band of Paiute Indians is located in Clark County, 55 miles northeast of Las Vegas. The reservation is 72,000 acres in size located along the Muddy River. Moapa and Glendale are two towns stretched over seven miles along Route 168 between the reservation and Southern Pacific Railroad and I-15. The Moapa Band of Paiutes is of the Southern Paiute ethnic origin and their traditional lands covered Southern Nevada, Southern Utah and Southern California. The original reservation boundary established on March 3, 1873 follows:

"Commencing at a point on the N. bank of the Colorado river where the eastern line of Nevada strikes the same; thence due north with said eastern line to a point far enough N. from which a line running due W. will pass 1 mile N. of Muddy springs; running due W. from said point to 115° W. longitude; thence S. with said meridian to a point due E. to the W. bank of the Colorado river; thence following the W. and N. bank of the same to the place of beginning." (Government Printing Office, 1900)

A year later the President cancels the March 3, 1873 E.O. and on February 12, 1874 redraws the reservation boundary and sets aside a reserve in lieu of the one established.

"Remainder of country claimed by Pai-Ute taken possession of by U.S. without formal purchase from them." (Government Printing Office, 1900)

On March 3, 1874 the President restores a portion of the reservation retaining 1000 acres at Moapa as a future reservation for the Southern Paiute. The loss of the tribe's original territory was followed by years of neglect, health epidemics and economic distress.

In 1941 the tribe sought and received federal recognition creating the Tribal Business Council. That same year, individual land allotments returned to communal tribal ownership and much of the land was subsequently leased to non-tribal members until 1968. In 1981 the U.S. government restored 70,565 acres to the tribe. Currently, some of the land continues to be leased for open cattle grazing, but the tribe also operates its own farming and agricultural enterprises

The tribe consists of approximately 290 enrolled members. One reservation population is estimated at approximately 220. There are approximately 84 individual family homes and trailers that include 40 HUD low-income housing units. Two separate floating ponds consisting of 4 separate ponds each handle sewage. The reservation has a Senior Center and a new medical clinic, the Irene Ben Medical Center. All non-emergency services are provided on a walk-in basis for medical visits with doctors and specialists for allergy, vision, dental. Additional medical services are contracted with for medical specialists. Special programs include a diabetes, child abuse, substance abuse and vocational rehabilitation.

Three tribal police officers provide law enforcement and a tribal judge hears civil and criminal cased at the reservation. Schools in these communities provide the Postal service, fire suppression, EMT response services and elementary education. One EMT resides on the reservation. Additionally, \$16,000 is provided for labor and education in exchange for a utility pipeline right-of-way. A new fire hydrant system is planned and is expected to be in place in the summer of 2002.

The population of the Moapa community has been stable over the last few years and there are strong familial ties with the Las Vegas Pauite Tribe. The Las Vegas Pauite Tribe manages medical services for the Moapa reservation. In terms of ethnic diversity, there are both Native Americans from other tribes, Pauites, and non-Indians in the community, principally through inter-marriage. The restoration of traditional lands was and continues to be an important policy objective of the Tribe. Though blood plays a role in determining Native American ethnicity with implications for services or tribal membership this has only become an issue in 1999.

With the return of 70,000 acres of the original reservation in 1981 new opportunities for economic development exist. Expanded economic development planning is ongoing. Economic

development is viewed as a priority by the governing tribal body, the Tribal Business Council. The unemployment rate is between 30 to 48 percent. For example, in 1996, 85 percent of tribal households were found in a survey to be "within the very low income to low and moderate income limits" (Deform, 1996). The tribe is the largest employer on the reservation with an estimated 120 employees working for both the for-profit and non-profit arms of the tribe.

Employment and revenue sources for the community are as follows: An important source of employment consists of jobs in the governmental and service provision sector on the reservation. These sources include the health clinic, the Senior Center, tribal government offices and a tribal store located on the reservation. A gaming center-store is also located on Interstate 15.

The sources of tribal revenues and personal income are primarily from employment in governmental and social services in the tribe, reservation businesses, agricultural development, leases of reservation land for cattle grazing, utility rights of way, and from employment in communities near the reservation. Tribal members view the tribe's economic base and plans for economic growth to be potentially vulnerable from the transportation of nuclear waste.

5.0 THE LAS VEGAS COLONY

The Las Vegas Paiute people are of the Southern Paiute ethnic origin whose traditional lands covered Southern Nevada, Southern Utah and Southern California. The Southern Paiute in Las Vegas are closely related to those Southern Paiute living on the Moapa Indian Reservation. The establishment by the U.S. of a large reservation, canceling the Presidents earlier E.O., and the U.S. taking of lands without formal purchase from the Southern Paiute provide some basis for the historic condition of the Las Vegas Southern Paiute.

The Las Vegas Colony was created in 1910 by the sale of 10 acres of land to the government for \$5,000 dollars by Helen J. Stewart "for the Indians in the Las Vegas Valley." (Harris, Interviewee 2002). The Las Vegas Paiute Colony is located on Main Street approximately 1.5 miles north of downtown Las Vegas. In 1968, an additional 10 acres was purchased for the tribe adjacent to the existing 10 acres. The purpose of the Las Vegas Colony suggests it purpose for all Native Americans in the Las Vegas area at the time of founding in 1910. The Reno Sparks Indian Colony provides an example of how different ethnic tribes organized on a reservation or colony. In 1982 the Las Vegas Paiute Tribe was officially established by the adoption of a tribal constitution approved by the Secretary of the Interior. The names on the base tribal role of 1982 form the tribal membership, as does the 1940 census role. In 1986 an additional 3,800 acres of land was added to the Las Vegas Paiute Tribe at what is known as the Snow Mountain reservation 21 miles north of Las Vegas with homes and a golf resort.

The Las Vegas Paiute Tribe is located along North Main Street in the City of Las Vegas adjacent to the Southern Pacific Railroad and I-15. The reservation tribal enrollment is 55. Tribal members living on the reservation is approximately 30. There are 18 trailers on the Las Vegas colony and 10 houses and 2 trailers on the Snow Mountain Reservation. Three buildings on the Las Vegas Colony have foundations and house health care services, social services, tribal administration, and smoke shop.

Services provided by the tribe include child daycare for between 25-35 children, language programs, and library programs. The tribe provides counseling, optical, mental, vocational rehabilitation, substance abuse and diabetes clinic for approximately 4,500 individual Native Americans in the southern Nevada region. The tribe experiences a high incidence of

diabetes, as high as 37% diabetic. The tribe's children attend public school in Las Vegas from kindergarten through high school.

Clark County and the City of Las Vegas provide basic services to the Las Vegas Paiute Colony including churches, retail stores, banks, government offices, EMS, hospitals, fire protection, and sewer and water. Eight police officers provide tribal law enforcement under contract. The judicial services are provided by a tribal judge who hears civil and criminal cases.

The Las Vegas Paiute Tribe employs approximately 300 employees from both the non-profit and for-profit arms of the tribe. The tribe operates two tribal smoke shops one on the Las Vegas Colony and one at Snow Mountain and is one of the largest western retailers of cigarettes. In 1994 the tribe opened the first of a 72 hole Pete Dye designed Nu-Wav-Kaiv golf course. The second course, Tav-Aiv-Kaiv opened in 1996. The third course is near complete and a hotel and casino are currently under construction. A new general-purpose building is planned behind the existing smoke shop. For both tribes the possibility of nuclear waste transportation through its lands are real and concerns over this are very high, not only as a source of adverse economic effects to the tribes' well-being, but to their very existence.

6.0 CULTURE, LAND AND RELIGION: INTERVIEWS WITH TRIBAL MEMBERS

Southern Paiute people have always recognized the importance of close family ties across all boundaries-- political, social and spiritual as a necessary part of maintaining tribal identity.

Today, traditional roles are maintained and witnessed in practice by tribal members. Traditional ceremonies are regularly practiced such as mourning ceremonies in the case of loss in the tribe.

Traditional subsistence and desert survival techniques are employed regularly. Hunting, fishing, and gathering are on-going activities for the Southern Paiute practicing traditional life-ways off of the reservation. Medicine or power is known to individuals to exist and be practiced by

"Medicine people" or "Indian Doctors" throughout the Southern Paiute tribes' aboriginal land.

Oral tradition provides a rich inheritance for the Southern Paiute people and only recently being tapped through new research. Documentation now will make tribal ethno-history available for passage onto the next generation.

"Nowadays it's a different because when my grandmother was a singer, she sat on the opposite side of the men that sang that had rattles, but nowadays you see women sitting on the men's side, and there are fewer of us women that are learning the opposite side. We go and we stay the whole night for it. All of our things have been handed down orally, like the Moapa band lived from the Warm Springs area down to Lake Meade...and out of the clans they had this one spokesperson, and they called them the chief...it was like a council." (Miller 2001)

Tribal society makes no distinction of blood where power is concerned. Medicine people are usually revered, however mistakes or errors in judgment will lower the status of a an individual "doctoring" or practicing "bad medicine."

Land is consistently viewed for its natural elements. Natural features inform identity, spiritual belief and inform social, cultural and political values. Geographic symbols play an important role in tribal identification; each group of the tribe took their names from the land they spend much time on a substantially on going basis. These are areas with large regional territories and with many well-defined natural features. Animals have always been viewed as a food source, but deeper complex spiritual relationships exist. Often the natural environment takes on the essence or spirit of an animal. In the Las Vegas Valley, many Las Vegas Native Americans know the Lone Mountain as "Turtle Mountain" owing to its shape when approached from the Northwest. Sunrise Mountain and Frenchman Mountain create the form of a Southern Paiute Chief when viewed from the west, presenting an enduring monument and reinforcement of traditional tribal origin. Closer to Moapa is the "Shadow of the Eagle," a mountain wide halftone or shadow viewed while looking across Moapa Valley from the east.

"The story tells of the endurance of the tribe as long as the Shadow of the Eagle is not disturbed." (confidential informant 2001)"

Yucca Mountain and Bare Mountain both are viewed as serpents possessing poisonous venom. Both Southern Paiute and Western Shoshone see Yucca Mountain as exhibiting the belly of the serpent with the winding ridge forming its backbone. The Gypsum Cave is an important source of spiritual power in the region known by many Southern Paiute to exist today.

The relationship to wildlife exists and forms another element of tribal identity and relations with the natural environment. Southern Paiute always have viewed the land as sacred and to be cared for. Cultural-spiritual assets are strongly associated with the land and are inherent elements of identity and power. An element of property ownership is whether rights to something can be inherited and it was practiced prehistorically by Southern Paiute regarding the planting, tending and harvesting of pine nuts. Regional land use was viewed as an expansive farm or ranch containing various resources known to its occupants. These practices by individual tribal members today are the inheritance and maintenance of intergenerational relationships with tribal ancestors and a commitment to steward the land. Though nonexclusive use took place at times, if continual use in an area recognized as the property of another family took place it could result in conflict. Recognition of land rights in relation to other people demonstrates a longstanding construction of property ownership. The tribe or nation status is formed as prehistoric property ownership relationships continue. Contemporary use or exercise of land rights takes place with or without state permit and with members of different tribes and nations. Adults teach their children at a young age traditional practices ensuring the deliverance of tribal knowledge. Land maintenance such as cleaning springs is part of individual ongoing practice. Individual praying and participation in traditional religious group ceremonies often take place and are expected to be in continuous use.

The views of tribal members opposed to high-level nuclear waste are strong. Many believe high-level nuclear waste should remain where it is in the states where it was generated. Others believe that a release will result in the destruction of tribal cultural assets as a whole if the region is made uninhabitable. There is no place the Southern Paiute has outside of their traditional lands which supports tribal identity. The tribes' creation story is similar to that of the Western Shoshone:

"Our creation story says that we came from Mount Charleston area. There's a special place there. And another lady told us there was a special place between Las Vegas and Moapa where the coyote was curious and up the mountain, that's where the Paiutes got away from him." (Miller 2001)

A loss of the tribal landscape is a significant impact to tribal society. The Southern Paiute possesses a deeply rooted connection to the land. At the core of tribal belief and value is the ongoing use of the land in ways unique to the tribe. Special effects or stigma induced effects are viewed as a destruction of the environment that amounts to the willful killing of the Southern Paiute people by the U.S. Speaking of past experience from above ground nuclear weapons testing, an informant explains:

"...It frightens me. Not only for myself, but look at my people. It frightens me because of my people. Because when asked later on when they start having these...the programs, and then we start finding out the stuff goes all over, the wind takes it every place, that it just will not deplete. You know, it will be in Mother Earth for no telling how long, it just scares me." (Samalar 2002)

Another informant reveals additional views:

"The land means everything to me. It feeds me. It clothes me. When I'm feeling bad, I can go there, and I can talk to her because I know she's older than me and I know she controls me and I don't have any control of her; so I have a lot of respect for the land...it is my prayers. It's what keeps me alive all this time, and my family." (Ohte 2002)

Presently, individuals participate in an intertribal organization studying adverse health effects downwind from the Nevada Nuclear Test Site. Questions about the current condition of

the land and potential for health exposure are being researched. There is uncertainty surrounding whether use of the land is safe and many risk questions remain unanswered. When asked about help for the tribe, the response of the same informant yielded a knowing response based on a certain solution for the protection of the land and people by taking spiritual responsibility for the tribe, going to a source of power out of reach of material living.

"You have to hit all people along this trail...And if they are not out there carry banners, you're going to have to let them all know what it is about, so they can find a way spiritually to appreciate Mother Earth. We fight the government. I feel a lot of people feel that way. Again, it should be a spiritual movement, because nothing else has been working. And again, I feel when it comes to the spiritual thing, it's an individual thing." (Ohte 2002)

Currently, Southern Paiute is unwilling to be put at risk from U.S. nuclear technology. Development affects the tribe in unique ways. The result of on-going investigations in ethnographic history provides ample documentation of extant tribal practices that can be impacted. Current tribal council member Kenny Anderson makes a point for the tribes' current level of activity stressing the adamant objection by the Las Vegas Paiute Tribe to the proposed Yucca Mountain repository:

"We're going to be voicing our opinion with letters and maybe meeting with both DOE and NRC, talking to them and giving them information that we can have our concerns, and what we, we basically say, we don't want it; we don't like it. We are sending all these papers to all people these are the reasons that the tribe has issues, which are that we feel is not safe." (Anderson 2002)

Based on the interviews, it is clear that tribal members are against the proposed Yucca Mountain site. The current direction of the tribe is not to spend time or effort on studies without a funding source. This position can be attributed to the high opportunity costs for involvement in this nuclear technology development conflict. For the tribe the costs of involvement are substantial. Any attempt by the tribe to conduct independent studies would be a waste for the reasons given by a tribal council member:

"Who's going to pay for our study? That costs a lot of money. Why would we do a study? Would it be to say, that it's not right, or it's not safe? That is what I am saying, we would do it for that reason." (Anderson 2002)

The belief that Yucca Mountain will fail (and this is expressed by some tribal members even before the project begins) addresses the need to prevent what is seen as willful contamination of land shared by tribal members. Tribal background is important to understand because it provides a backdrop with which to view the high-level of concern expressed over the risks of nuclear waste transport, the sensitivity to potential stigma effects, and the preexisting social impacts that will affect the tribe. An already heightened awareness is at work in the tribal communities as tribal members witness existing exposure from nuclear weapons today:

"Well, obviously there will be a lot of fatalities and a lot of long term effects from it. That is already happening. Again, it's not a matter of if it will happen but when it will happen. The simple fact that there is already contamination, both people, the environment is a clear indication of what is going to happen, period. They haven't contained it to this point. How are they going to contain hauling the waste? It's a dream. So this is just more of a burden" (Harris 2002)

The proposal to store high-level nuclear waste at Yucca Mountain is viewed as an additional burden. The past release of radiation from the Nevada Nuclear Test Site and existing contamination of the land is seen as stretching back into history and carrying forward into the future to threaten future generation of Southern Paiute, and ultimately maybe even the existence of the tribe.

"And the test site area out there where is you get back into that where you seen the pristine country out there that was once available for the Indians because my mother used to travel out there, when she was a child in a wagon, they go back up in there. They have camp se up there where they would go every year. It was traditional for them to see and gather. But now, it's - the land is dirty; it's polluted. And I look at that Pahrump valley over there, and I see that deer and everybody's eating that deer, and I think, man, that deer came off the test range, on over; and they're eating it. I mean do they understand where it came from? I mean they just don't get rid of that. The body absorbs it. I mean I've absorbed it. And I'm afraid of the contamination of the water." (Wilson 2002)

The future existence of the tribe is in its relation with the land. The proposed repository is viewed to have significant impact upon both the Moapa Band of Paiutes and the Las Vegas Paiute Tribe. The federal government appears to be unwilling to take the tribes' concerns seriously, at least past exposures, but assures the tribe of the safety of a repository at Yucca Mountain. The U.S. government is expected to continue providing support to each community through programs for the basic care of the tribes. It is certainly clear that the U.S. government is moving forward with its plans to store nuclear waste and that these plans are against the expressed opposition of the Southern Paiute people.

7.0 RESPONSES TO THREE TRANSPORTATION ACCIDENT SCENARIOS INVOLVING NUCLEAR WASTE

Tribal members who were interviewed were given three accident scenarios involving the transportation of high-level nuclear waste. The accident scenarios are consistent with those used in the other Clark County socioeconomic impact assessments directed at measuring impacts on property values, public safety preparedness, fiscal-governmental impacts and costs due to federal mandates, and the tourism sector. The first scenario assumes transporting over 49,000 truck shipments of nuclear waste (6-8 times per day) over a 24-year period from 2010 through tribal lands. In this scenario the tribes impacted include the Moapa Band of Pauites and the Las Vegas Pauite tribe. The Las Vegas Pauites encompass two sites: one at the Snow Mountain Reservation (21 miles north of downtown Las Vegas on U.S. 95) and the Las Vegas Pauite Colony (10 acres two miles north of downtown Las Vegas).

The second scenario assumes a 24-year shipment campaign through the Moapa reservation and near the Las Vegas Pauite communities. Three years after the shipments commence, an accident occurs on routes very near or in the tribal communities. However, the cask remains intact and no radiation is released, but the local and national media cover the event

extensively. In the third scenario, a major transportation accident occurs invoking the release of radioactive materials near or in the reservations. A fire burns for more than two hours; winds carry the fire plume towards the tribe dispensing radiation at high levels over a wide area. Several persons receive doses that result in cancer fatalities. Six months later the clean-up effort is still underway, and is complete after one year.

Tribal members representing the two tribes were asked to what extent each transportation scenario would affect their communities' quality of life, economic well being and cultural values. The analysis deals with each tribe separately by each accident scenario. The analysis is based on qualitative research that seeks out thematic patterns and is supported by one or more quotes from the interviewees.

7.1 The Moapa Band of Southern Pauites

7.1.1 Scenario 1

Eventuality of a transportation accident:

A common theme running through the responses is that there is the belief that a nuclear waste transportation accident would occur over the 24-year period of shipping nuclear waste to the repository. Although the scenario deals with a three-year period without accident events, nearly all interviewees dismissed a no-accident likelihood over the entire shipment period.

"It's a gamble, a risk. Somewhere, sometime an accident could happen...when you say it will not happen – it's like the end of us – something will [happen]."

"Even if they say it is safe, I do not want it here. It should go elsewhere. We produce not even one percent of [nuclear waste] in Nevada."

"If there were no accidents [within the first three years] it would be fine, but one day there may be an accident."

"Anything could happen to the community; we don't know"

"There is no guarantee there will not be an accident. [We] need to look at the future. If there is an accident, will the government compensate the tribe for that? The government will not do that; the government is very tricky. Most tribes feel the same way about [the federal] government because our life isn't any better."

Need for Preparedness and Education:

Concomitant with the expression of inevitability, interviewees also expressed the need for emergency response preparedness before any shipments begin and education aimed at increasing tribal awareness of nuclear waste issues. Emergency response/ preparedness as part of the community's public safety infrastructure was viewed as critical for the Tribe (it was the topic of an earlier report on the Moapa tribe).

"We would have to develop emergency plans and response capacities. We will need money to develop [public safety], that and a community-wide effort."

"It is not ok to ship nuclear waste through the reservation. We need to learn about, read about it: the tribe is not aware or educated on the issues. A lot of Indians are quiet, not really outspoken; there is a need to study it."

"If transportation [of nuclear waste occurs] we have to have emergency plans and public safety [capacity] in place before the first shipments."

"We will not know if the emergency response team will let us know fast enough if there is a problem. We don't have disaster plans. Where are Native Americans considered in emergency plans? Never. I think more should be done to help the reservation be prepared if a disaster should happen."

"So many of our people don't understand the transportation of nuclear waste...they don't really know about it."

Public Concern and Fear:

The transportation of nuclear waste through or near the Moapa community even without accidents will create an unusually high-level of public concern and fear. One common response found in the interviews was to oppose its transportation even if no accidents were to occur. This attitude relates to the sense of inevitability of future accidents, but also to the moral issue of transporting nuclear waste through an Indian community that believes it has already experienced

radioactive contamination from earlier NTS testing activities. Several quotes related to this theme are as follows:

"How would you feed the people if the land became radioactive?"

"The concern is significant, but what can a little tribe do against the U.S.?"

"I don't like it. Just the fact that it is nuclear, I don't like it. I don't care how far it's going through without an accident, I don't like it."

"It would be good if there was no accident, but there would be an underlying fear, a paranoia of just the fact they [transport] were coming through [the reservation] everyday."

7.1.2 Scenario 2

Impacts on Economic Development:

Even without a breach of the cask, several persons mentioned the potential adverse impacts on economic development on the reservation. An earlier report on the possible economic impacts to the Moapa Tribe identified agricultural crops and the highway-based smoke shop and its expansion as particularly vulnerable to transportation mishaps involving nuclear waste. This concern is corroborated in this study.

"The economic development would be impacted on the reservation because of the proximity of the freeways and railroads. It will hinder the tribe's finances because it would [impact] economic development. Businesses would not want to locate there."

The accident characterized in scenario #2 also resulted in several interviewees arguing that shipments should be rerouted around the reservation; and several others pointed to the need for reservation-based emergency planning.

Questioning Trust:

There have been a substantial number of articles written on the risks of nuclear waste and public trust in government to manage the repository program in a safe manner. The question of trust surfaced in relationship to Scenario 2. Specifically, interviewees expressed concern about the trustworthiness of receiving accurate information about the nature of the accident and actual levels of radioactive materials released. This response was unexpected based on a scenario that did not result in any release. The level of concern over trust in reporting the nature of the accident may reflect high levels of public concern over transportation risks, perceived past governmental cover-ups or lack of information on earlier environmental contamination, all mentioned by the respondents.

"There needs to be a more thorough examination. To be on the safe side we need to take more time to study [the accident]."

"When you say no radiation, you can't believe that...but the fact is there is a problem, they just never admit it. So in that scenario, if they had a crash and the cask was intact, you can only hope they are telling you the truth. This will not diminish the fear factor even if found it is intact."

"[I] Won't believe it will be contained. What can you do when you're frightened? I'm an old woman...I would want to see that my family was safe, my people are safe, but how in the world could I go about it."

7.1.3 Scenario 3

The scenario three accident resulting in radioactive contamination over an extensive area was viewed as having a devastating effect and permanent impact on the viability and perhaps even the existence of the tribal community. It seems that this perspective may be exacerbated by the tribe's prevalence of cancer and experience of exposure to radioactive contamination from the earlier NTS tests. The scenario indicated that cleanup would be accomplished after one year.

Despite this information, many of the interviewees expressed a profound sense of hopelessness and vulnerability under Scenario #3. The following responses reflect this:

"If the casket broke open and created radiological fallout, carried by the wind across the reservation, I think it would change the people. I think it would change their way of thinking...where would you go? This is our home. Good or bad we have to live with it."

"There would not be a tribe. Everyone would go. The tribe would die...the land would not work. Where would we relocate the tribe...we could not take the land back...people would want to leave, but they couldn't because of financial problems...some would stay because... [They] believe it's truly their homeland."

"Contamination of the community would also mean our fields...the farm...major impact to our homeland, to our tribe, to economic development, to the water, everything. The federal government could never address that. It would be an extremely long term effect of damage on our reservation, on our home...the earth, the one to which we are attached to...the psychological effect would be devastating."

"...That would be the demise of the tribe because our tribe is an outdoor people. We're outside all the time with the land."

7.2 The Las Vegas Pauite Tribe

7.2.1 **7.2.1** Scenario 1

Selected interviews were conducted with tribal members at both Pauite sites, the Las

Vegas Colony and Snow Mountain. Responses to the no-accident scenario were generally similar
to concerns expressed by interviewees from the Moapa Tribe. For example, several interviewees
expressed a fatalistic attitude with respect to transportation accidents over the life of shipping
nuclear waste to the repository. However, unlike Moapa residents, several interviewees from the
Las Vegas Pauite Colony did not see adverse impacts to the tribe unless an accident would result.
However, those individuals expressing this view also were not supportive of nuclear waste
shipments through or near the reservation or into the state.

Even under Scenario 1, concerns were expressed over the potential of adverse economic impacts to the tribe especially at Snow Mountain around U.S. route 95. The economic development at Snow Mountain includes a significant golf course, a mini- market and a bottled water firm. These and future growth of the area were viewed as being sensitive to shipments of nuclear waste. The following quote taken from interviews represents this viewpoint:

"There is bound to be an accident... [Transportation of nuclear waste] is going to affect our business, our golf course...we're looking toward new business out there. We can't have it even with no accidents..."

7.2.2 Scenario 2

Two major themes emerge from the pattern of responses to a Scenario 2 event. Similar to the responses found in interviews with Moapa residents, trust in government to provide timely and accurate information about the accident was questioned by several interviewees. Even without the release of radioactive materials, under Scenario #2, some interviewees expressed concerns over stigma effects resulting in economic downturns for the tribe. For example,

"If there are no accidents, just by having [nuclear waste] transportation, I think it would affect a lot of people. People would not want to come to this area because something could happen. [Under scenario 2] the concern would be over greater risk...we're not like ... an endangered species. That's what we were like. If nuclear waste [is transported] into the area we would be like an endangered species because there are not a lot of southern Pauites around compared to other tribes – we're small."

7.2.3 Scenario 3

A Scenario 3 event according to the responses would have serious long- term contamination impacts beyond the one-year clean- up effort depicted in the scenario. The viability of the tribe itself would be questionable after such an event because of perceived

permanent economic downturns to the tribe's resource base, out migration and irreversible health impacts.

"Some would move; others with no money would stay. There may not be any choice. After one year of clean- up I wouldn't think it was safe. I wouldn't take any chances with my child"

"[The tribe] is resort business oriented now? [The accident] would affect us. We would have to shut down. Our main customers are from out of town. When they had the World Trade Center incident, all airlines were shut down for a week. Las Vegas was devastated. Fifty percent of our customers were gone, just like that...but if a nuclear [accident] happened, it would be worse."

7.3 Summary

Interviews with members of the two Southern Pauite tribes located in Clark County at three geographical sites reveal high levels of consistency. Altogether, twenty interviews were completed to assess the perceptions of the type and nature of the impacts that could occur based on three transportation scenarios. The sample size does not warrant generalization to the larger population, but the intent was to obtain in-depth interviews in order to more fully understand and appreciate the perspectives of the tribal members in the context of their own history and culture.

A number of key themes emerge from the interviews. These are as follows:

- There is a high level of distrust for the federal government to provide accurate information regarding any future transportation accidents or preventing them. This attitude is related to a sense of inevitability of future accidents.
- Tribal members expressed concerns related to the potential loss in finances and future growth as a result of nuclear waste transportation. This concern has its basis in the relatively recent economic development that has occurred and the nearness of these activities to potential shipment routes.

- The issue of nuclear waste transportation to those interviewed is not just an issue of
 economics, but is embedded in a larger history of health impacts experienced by the
 tribe and associated with earlier nuclear fallout and exposure to radioactivity from
 atomic bomb tests at the NTS.
- The tribe is perceived as being small, isolated and vulnerable to an accident involving nuclear waste. A serious accident involving the tribe's exposure to radioactive materials (Scenario #3) was perceived as having the likelihood of ending the existence of the Southern Pauite tribe due to the permanent out migration, health effects and discontinuity of tribal culture based on the land.
- Mitigation strategies identified include re-routing around the reservation,
 development of tribal emergency response capacity, alternatives to storage in Nevada,
 and enhanced education and awareness about nuclear waste transport.

8.0 ENVIRONMENTAL JUSTICE CONTEXT

In 1994 the U.S. President issued Executive Order 12898 regarding environmental justice. E.O 12898 requires all federal agencies to consider impacts of its activities on low-income, minority and subsistence populations to insure they do not suffer disproportionately from US federal agency policy and program deployment.

Historical vulnerability of the Southern Paiute tribe exists from the loss of land and adverse health consequences from radiation exposure they believe came from the testing of nuclear weapons. Though the past U.S. policy of restricting tribal practices outside of the reservation are having lasting impact. Tribal members believe that nuclear waste places an everlasting burden upon them and the land.

Considering the potential past exposure of the Native American inhabitants of the Great Basin to their physical health and environment, it demonstrates that little more than program compliance activities are conducted by nuclear technology development proponents. Native Americans have responded by creating their own nuclear risk management project collaborating with scientific researchers conducting participatory research to determine exposure pathways unique to Native American lifestyle. Access to information on Native American exposure is inadequate, incomplete and financial resources to investigate are limited, Native Americans have documented important exposure pathways and created their own opportunities to analyze results from a culturally appropriate understanding yielding results important to understanding potential impacts at the community level.

A review of Native Americans in the Great Basin provides sufficient evidence of potential exposure from past nuclear weapons testing by exposure pathways unique to Native American tribes and the possibility of future exposures as a result of the resumption of nuclear weapons testing, transportation of nuclear materials and potential operation of a high level nuclear waste repository proposed for Yucca Mountain. These activities and possible exposures warrant further study. Further documentation of baseline conditions is necessary to measure tribal vulnerability and potential impacts. Tribal institutions that maintain a culturally appropriate perspective in the interpretation and analysis should conduct the analysis of results. Creation of an environmental monitoring and surveillance system can provide important information on range condition, plant condition and animal condition changes over time that may result from nuclear technology development and deployment.

Conflicts exist and remain unresolved. Recognition or legitimacy arguments persist and rely on questionable grounds. Ethnic tribes are known to have ties to Yucca Mountain but are not

engaged by the US DOE. A selective process of identifying participants from a community of origin in cultural studies conducted by the DOE remains the sole source for tribal participation. Informal participation is the standard of accountability as DOE reaches to claim it has "government-to-government" relations. Other participatory roles for the tribes are required but are without funding.

Serious and real impacts have taken place in the past and in some cases an on-going crisis exist. Broader concerns unique to Native Americans have not been addressed and need immediate attention with respect to the nuclear waste repository and its shipment campaign. Environmental health of Native American people and land must be investigated by a culturally appropriate investigation, analysis and interpretation of results.

BIBLIOGRAPHY

- Agency For Nuclear Projects (2002). A Mountain of Trouble: A nation at risk. Report on Impacts of the Proposed Yucca Mountain High-Level Nuclear Waste Program, Vol. III.
- Cohen, F. S. (1942). Handbook of Federal Indian Law, United States Government Printing Office, pp122.
- Department of Energy (1990). Interim Report January 1990: Literature Review and Ethno history of Native American Occupancy and use of the Yucca Mountain Region DOE/NV-10576-21.
- Dufort, Molly (1996). Community Health Information Project, Moapa Band of Paiutes. Federal Lands Policy Management Act 1976.
- Fowler, D. D. (1980). History of Great Basin Anthropological Research 1776-1979, Journal of California and Great Basin Anthropology, Vol. 2. No. 1, pp. 8-36.
- Fowler, C.S., Hamby, M., Rusco, M. (1991). Native Americans and Yucca Mountain: A revised and updated Summary report on research Undertaken between 1987 and 1991. Vol.1. Nevada Agency for Nuclear Projects. 1992.
- Frohmberg, E., Goble, R., Sanchez, V., Quigley, D. (2000). "The Assessment of Radiation in Native American Communities from Nuclear Weapons Testing in Nevada," Risk Analysis, Vol. 20 No. 1.

- Government Printing Office (1900). Indian Land Cessions in the United States. pp. 862.
- Kelly, I. T. (1934). "Southern Paiute Bands," American Anthropologist Vol. 36 No. 4.
- Knack, Martha (2001). Boundaries between: the Southern Paiutes, 1775-1995. University of Nebraska Press.
- Kvale, S. (1996). Interviews, An Introduction to Qualitative Research Interviewing. Sage Publication, Thousand Oaks, CA. pp. 46.
- Marshall, John (1823). Johnson v. McIntosh, United States Supreme Court. Vol. 21 U.S. pp. 543-577.
- Marshall, John (1831). Cherokee Nation v. Georgia, United States Supreme Court. Vol. 30 U.S. pp.1-17.
- Nevada State Health Division (1999). Nevada State and County Health Profiles (1999) pp. 1.
- Quigley, D., Handy, D., Goble, R. Sanchez, V. and George, P. (2000). "Participatory Research Strategies in Nuclear Risk Management for Native Communities," Journal of Health Communication, Vol. 5 No. 4.
- Rusco, Elmer R. (1992). Historic Changes in Western Shoshone Country: The Establishment of the Western Shoshone National Council and Traditionalist Land Claims, 16 American Indian Quarterly 337.
- Stephan, Talmon (1998) The recognition of Governments in International Law Clarendon Press, Oxford.
- Slovic, P. (1992). Social Theories of Risk, Krimsky and Golding, Preager Publishers, Westport CT. pp120.
- Tversky, A., Kahneman (1974). Judgment under uncertainty, Heuristics and biases, Science, 185 pp1124-1131
- Urban Environmental Research (2000). Moapa Band of Paiute Indians, Governmental and Fiscal Impact Report Related to Shipments of High-Level Nuclear Waste.
- USDOJ http://www.usdoj.gov/otj/sovtrb.html