

Tribally Approved
American Indian Ethnographic Analysis of the Proposed Delamar
Valley Solar Energy Zone

Ethnography and Ethnographic Synthesis
For
Solar Programmatic Environmental Impact Statement and Solar Energy Study Areas in Portions
of Arizona, California, Nevada, and Utah

Participating Tribes

Moapa Band of Paiute Indians, Moapa, Nevada
Pahrump Paiute Tribe, Pahrump, Nevada
Paiute Indian Tribe of Utah, Cedar City, Utah

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DELAMAR VALLEY

The proposed Delamar Valley solar energy area (SEZ) is located in Lincoln County, Nevada and it is outlined in red in Figure 1. The proposed SEZ is approximately 11 miles east of Alamo, Nevada and 22 miles west of Caliente, Nevada. The Intermountain Power Project (IPP) power line road is perpendicular to US 93 and runs parallel to the proposed SEZ. The proposed SEZ is rests about nine miles east of Pahranaagat Valley.

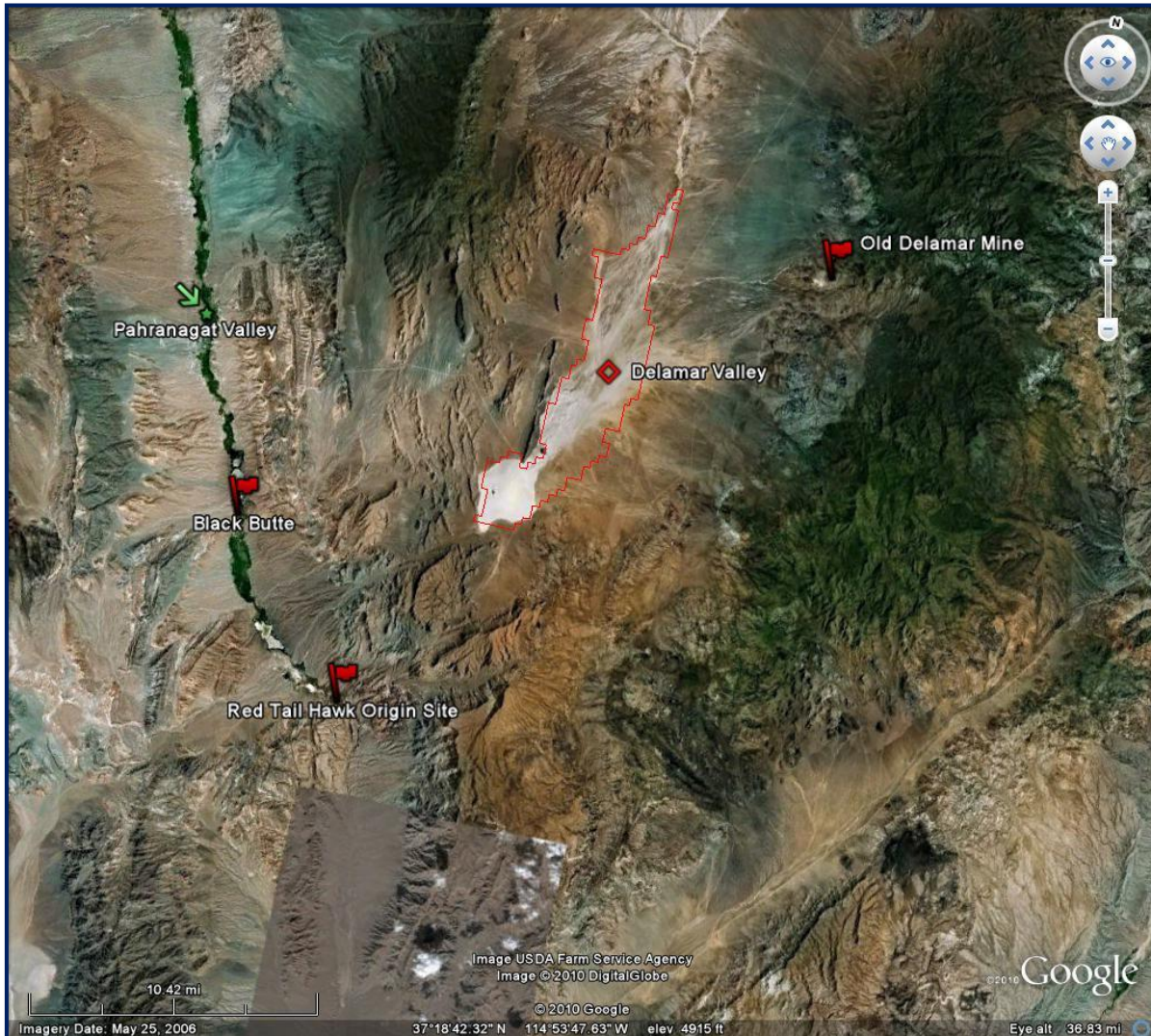


Figure 1 Google Earth Image of Delamar Valley SEZ American Indian Study Area

The Delamar Valley SEZ American Indian study area extends beyond the proposed boundaries of the SEZ and includes the cultural resources in the surrounding landscape. The SEZ American Indian study area includes plant communities located within the proposed SEZ boundary, geological features and water sources located just outside the proposed SEZ, and trail systems that people used from neighboring or distant communities that pass through the SEZ American Indian study area to reach nearby medicinal and ceremonial areas (see Figure 1). Southern Paiute tribal representatives maintain that, in order to understand native peoples'

connections to the proposed SEZ, it must be placed in context with neighboring places and their associated cultural resources.

Summary of Significance

The lands under consideration in the Delamar Valley SEZ American Indian study area traditionally were occupied and used, aboriginally owned, and historically related to the Numic-speaking peoples of the Great Basin and western Colorado Plateau. Tribes specifically involved in the field consultations that are summarized here are the Moapa Band of Paiute Indians, Pahrump Paiute Tribe, and the Paiute Indian Tribe of Utah (PITU), who represent the cultural interests of the Southern Paiute people. These Numic-speaking peoples have gone on record in past projects and continue to stipulate here that they are the American Indian people responsible for the cultural resources (natural and manmade) in this study area because their ancestors were placed here by the Creator and have lived in these lands since time immemorial, maintaining and protecting these places, plants, animals, water sources, and cultural signs of their occupation.

These Numic-speaking peoples further stipulate that because they have lived in these lands since the end of the Pleistocene and throughout the Holocene, or approximately 15,000 years, and deeply understand the dramatic shifts in climate and ecology that have occurred over these millennia. Indian lifeways were dramatically influenced by these natural shifts, but certain religious and ceremonial practices persisted unchanged. These traditional ecological understandings are carried from generation to generation through the recounting of origin stories occurring in Mythic Times and by strict cultural and natural resource conservation rules. The involved American Indian tribal governments and their appointed cultural representatives have participated in this Programmatic Environmental Impact Statement in order to explain the meaning and cultural centrality of the plants, animals, spiritual trails, healing places, water, geological resources, and places of historic encounters that exist in these lands.

The Late Pleistocene ecology of the Great Basin region was rich in fauna and flora. Central to this supportive habitat were wet, forested uplands, full grasslands, and long wetlands located along a complex network of streams feeding into medium and large lakes (Grayson 1993). American Indian people lived, hunted, gathered, made trails, built communities, and engaged with the topographically interesting landscape through ceremonial activities. Large mammals like mastodons ranged throughout these habitats from the lowest wetlands up to 8,990 feet, where the Huntington Mammoth remains were found—a subalpine environment in the Late Pleistocene (Grayson 1993:165). While contemporary scholars often focus their studies on charismatic species like the mastodons, dozens of medium sized mammals were found including camels, horses, ground sloths, skunks, bears, Saber-tooth cats, American lions, flat headed peccaries, muskoxen, mountain goats, pronghorn antelope, and American cheetahs (Grayson 1993:159). A great diversity of smaller mammals was also present. Like their cousins, avian species were abundant and occurred in many sizes. Their sizes ranged from the largest, the Incredible Teratorn with a wingspan of 17 feet and the Merriam's Teratorn with a wingspan of 12 feet (both related to the condors and vultures) to the smallest, humming birds (Grayson 1993:168). Other birds included flamingos, storks, shelducks, condors, vultures, hawks, eagles, caracaras, lapwings, thick-knees, jays, cowbirds, and blackbirds (Grayson 1993:167). The biodiversity of the land and air was matched by the fish species in the streams and lakes. There

were at least 20 species of fish including whitefish, cisco, trout, chum, dace, shiner, sucker, and sculpin (Grayson 1993:187). The fish species traveled widely across the Great Basin through a variety of interconnected lakes and streams. Late Pleistocene lakes were but a central portion of this hydrological network supporting fish species and, by implications, great biodiversity in flora and fauna.

The large number of species of vultures, condors, and teratorns in the Late Pleistocene Great Basin raises a number of interesting ecological questions...the fact that there were so many species of these birds here suggests that the mammal fauna of the time was not only rich in species, but also rich in number of individual animals (Grayson 1993:169).

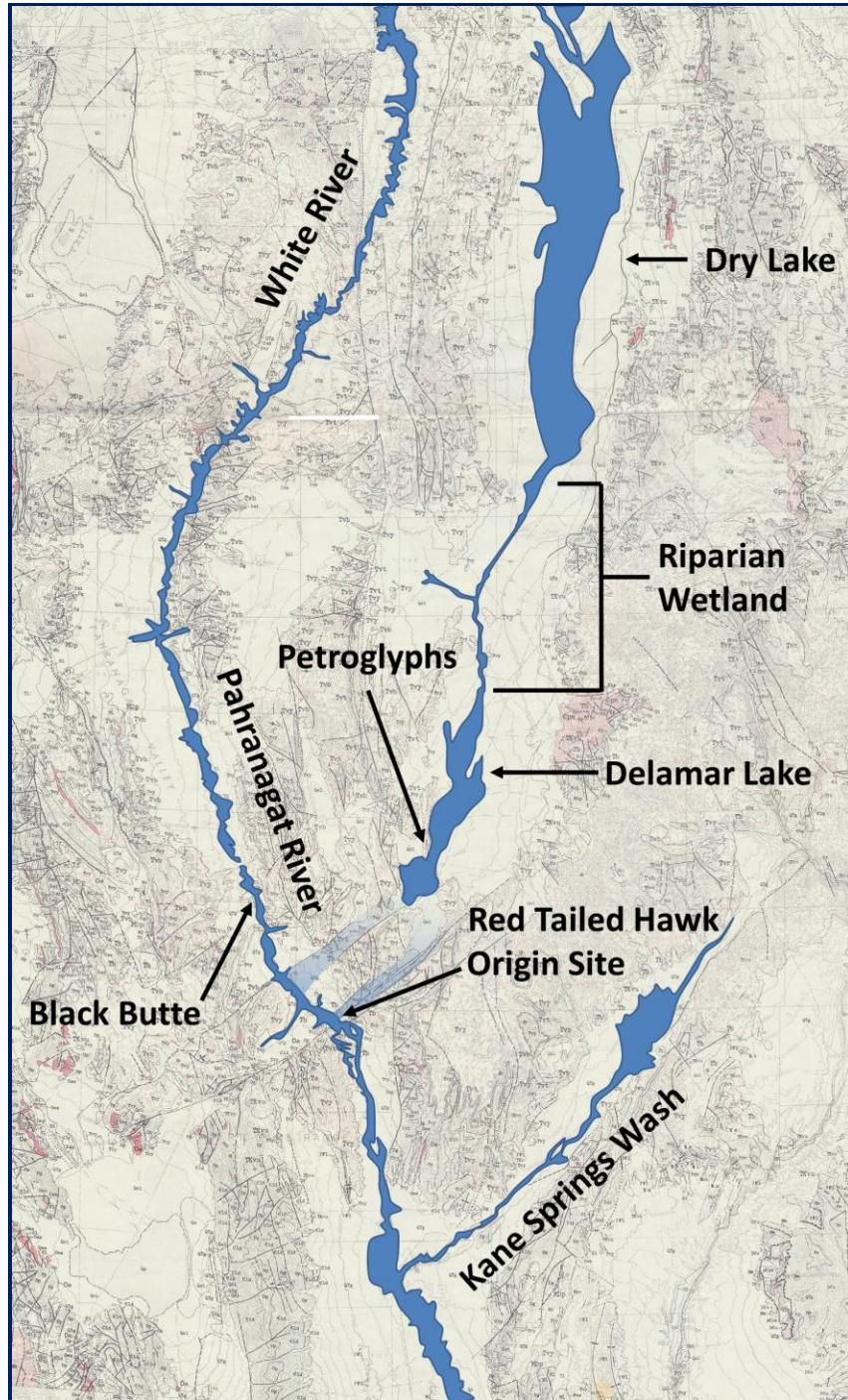
Naturally, the American Indian populations were also well supported by this bounty of nature.

During the Pleistocene epoch, the Delamar and Pahranaagat Valleys demonstrated very different climate and ecology than they do today. During the Pleistocene, the pluvial lakes in Dry Lake Valley and Delamar Valley were full. Tschanz and Pampeyan (1961) estimated that the maximum shorelines of the lakes were 50 feet deep in Delamar Lake and 75 feet deep in Dry Lake (see Map 1). These estimates are conservative because the measurements were observed in reference to normal levels. It is worth noting that during periods of above average precipitation, the depth would increase temporarily beyond the observable shorelines. The surface areas for Dry Lake and Delamar Lake are 30 square miles and 16 square miles respectively (Eakin 1963). In the neighboring Pahranaagat Valley, the Pleistocene epoch yielded a meandering stream known as “ancestral White River” (Reso 1959). The stream has changed greatly since the Pleistocene when it truncated the alluvial deposits growing in the Pahranaagat Valley. Contrastingly, the current streambed has been breached by local alluvial-fan deposits (Jayko 2007).

The flora of the Delamar Valley SEZ American Indian study area transitioned during the Pleistocene, from the predominantly cooler weather trees and shrubs such as pine, fir, juniper, maple, alder, currant, woods rose, and snowberry, to warmer weather more xerophytic plants such as creosote bush and fourwing saltbush that are now ubiquitous (Wells 1983). The impact of the Pleistocene is also seen in the distribution of plants in the playa today; the time spent underneath the pluvial lakes corresponds to high levels of salts and fine textured soils, which limit plant growth (Charlet 2007). Consistent with the understanding of past impacts, Eakin (1963) explains that the drier, modern Delamar Valley lacks a perennial waterway, but the physiographic features of water found throughout the valley, such as stream channels, were likely formed during the wet Pleistocene times.

While the environmental setting of the Delamar Valley SEZ American Indian study area has changed dramatically over the geologic timescales of Southern Paiute use and inhabitation, the Southern Paiute people have continued to thrive. Countless shifts in the plant and animal communities have been met with constant co-adaptation; traditional ecological knowledge is continually developed and maintained in harmony with the natural setting. Ultimately, the sustainability of the landscape is ensured through the implementation of thoughtful, active management as a part of the Southern Paiute sacred ecology.

The following Pleistocene map was developed by superimposing images of the Delamar Valley Pleistocene hydrological system onto topographical maps of the Delamar Valley SEZ American Indian study area by using image-manipulation software (see Map 1). It is important to note that this map does not present definitive boundaries of the Pleistocene hydrological system, but is designed to geographically contextualize this hydrological system and its role in the Delamar Valley SEZ American Indian study area.



Map 1 Pleistocene Hydrology

Special Features

Southern Paiute people have used the Delamar Valley SEZ American Indian study area for thousands of years. They believe that the Creator gave these lands to the Southern Paiute people and that they have a responsibility to maintain cultural connections to the land and its resources. During the ethnographic field sessions, tribal representatives identified the Delamar Valley SEZ American Indian study area as part of a large ceremonial landscape that contains many traditional use features like hot springs, volcanic places, and important plant and animal communities (see Table 1). The Delamar Valley SEZ American Indian study area is central to the lives of Southern Paiute people because they have a deeply rooted spiritual connection to the land that weaves stories and songs into the landscape, connecting all elements of the universe.



Figure 2 View Looking East Across the Delamar Valley SEZ American Indian Study Area

Feature Type	Special Feature
Source for Water	➤ Seasonal Delamar playa lake, Pleistocene lakes and wetlands, Pahranaagat Valley
Evidence of Previous Indian Use	➤ Grinding slicks, rock shelter, offerings, Water Babies, Ocean Woman’s Net, mountain sheep peckings, Knotted Strings, Twins peckings
Geological Features	➤ Volcanic mountains (Southern Pahroc Range), Delamar Mountains, isolated knoll (Turtle Butte), Seasonal Delamar playa lake, viewscape
Source for Plants	➤ Ceremonial plants, medicinal plants, food plants, utilitarian plants
Source for Animals	➤ Birds of prey, game birds, migratory birds, predatory mammals, game mammals, small mammals, lizards, snakes, spiritual animals
Indian History	➤ Labor mine camp, Indian doctoring, Indian cowboys, family history

Table 1 Special Features Identified in Delamar Valley SEZ American Indian Study Area

The Delamar Valley seasonal playa lake is a dominant feature of this landscape. Due to intermediate wet and dry periods that seasonally occur over decades, the lowest portions of the Delamar playa are thick white mud flats. Intruding into this rather vast sea of white is a dark, thin, and tall volcanic ridge. A few black volcanic outcrops also occur in the bottom of the playa. Places that contain the presence of volcanic activity are considered sacred and powerful. Southern Paiute people believe that volcanic events are moments when *Puha* (power) deep inside the Earth is brought to the surface as a way for the land to renew itself and to distribute *Puha* across the landscape.

The topography is accentuated by high snow-capped and forested mountains whose rain and snow drain into and periodically fill the playa. The combination of water, expansive vistas, white mud earth, and a dark black volcanic ridge produces a landscape that, according to the Indian people, identifies this place as a source of *Puha* and powerful natural and spiritual resources.

The power of the topography was also enhanced by the presence of a steep sided knoll located in the playa just east of the volcanic ridge, which was labeled as Turtle Butte by Indian representatives (Figure 3). Turtle Butte was also identified as a location for vision questing. Vision questing destinations are selectively marked and offerings and prayers are left for placation and gratitude. Both remain to indicate the meaning of the place as it was defined at Creation.



Figure 3 Delamar Valley SEZ American Indian Study Area Facing Southeast with Turtle Butte as the Central Focus

The volcanic ridge has three concentrations of rock peckings. One small panel occurs at the very southern tip of the ridge (see Figure 4). A second set of peckings occur on the northeast side of the ridge in and around a set of large boulders which forms a shelter (see Figures 6 and 7)

at the base of the ridge located just across from the steep knoll. A number of grinding slicks were also found (see Figure 5).



Figure 4 PITU Tribal Representative Beside a Pecking Panel on Southern Tip of the Ridge (left) and Figure 5 Grinding Slicks at the Shelter in the Delamar Valley SEZ American Indian Study Area (right)



Figure 6 Pecking on Side of Shelter (left) and Figure 7 Paiute Tribal Representative and UofA Ethnographer at Shelter (right) in the Delamar Valley SEZ American Indian Study Area

A third set of panels occurs less than a mile further north along the ridge. While the first two pecking areas have only a handful of peckings, the third area has hundreds of carefully pecked designs and images. Among these are numerous peckings of water babies, Ocean Woman's Net, and mountain sheep. A unique pecking depicts a transformed shaman having a spirit helper inside his body and a knotted string (see Figure 8). One set of peckings was interpreted as the Twins, who represent the Salt Song sisters—Creator beings who participated in the formation of the Southern Paiute spiritual trail to the afterlife. Numerous offerings were found along the base of the volcanic ridge.



Figure 8 Transformed Shaman with Spirit Helper (right) and a Knotted String (left) in the Delamar Valley SEZ American Indian Study Area

These images are similar to those at Black Butte ceremonial area and the Red Tail Hawk Origin Lake, each located a few miles away in Pahrnagat Valley. Black Butte it is a place where water babies live and where powerful persons came to acquire water babies as spirit helpers. Previous studies documented that water babies were acquired by established rain shamans. A similar interpretation has been suggested for the Delamar Valley SEZ American Indian study area. The Red Tail Hawk Origin Lake is a large Late Pleistocene lake (today called Lake Maynard) located at the major constriction of the Pahrnagat hydrological system. The Origin Story says that as the hawk sat on the edge of the cliffs that define the lake, his tail dipped into the water and received a white stripe on it, similar to the white ring of this lake. Among the number of peckings and paintings at this site are The Twins (Figures 13 and 14), which are identical to those at Delamar seasonal lake (Figure 9).

During multiple field visits, tribal representatives identified 19 traditional use plants and 42 traditional use animals within the Dry Lake SEZ American Indian study area. The presence of these plants and animals add to the SEZ American Indian study area's cultural importance because they are associated with medicine, ceremony, and Creation.

The Delamar Valley SEZ American Indian study area is also important to the history of Indian and Euro-American relations. Southern Paiute men worked in the nearby Delamar Mining Camp around the end of the 19th century. The Paiute camp was photographed and pictures were taken of a Dr. Mayo amputating the leg of an injured Southern Paiute miner with an Indian medicine man. Southern Paiute representatives interviewed identified family members who worked at the mine and recounted stories of relatives ranching throughout Delamar Valley.

The Delamar seasonal lake area was interpreted as a ceremonial area having many features, some known at this time and some to be identified through further study. This

ceremonial area is interpreted as being a part of ceremonial places such as Black Butte and the Red Tail Hawk Origin Lake located in and responsive to the Pahrnagat hydrological system. The presence of water babies links this connection due to their ability to travel through underground water ways. This water system is among the most famous in the region because of its abundant water, wetlands, and good soils that would have supported large irrigated farming communities and extensive fauna and flora communities. The area is especially important local and migratory birds. In addition, this hydrological system contains a series of culturally and functionally interconnected ceremonial areas. These include (1) White River narrows pecking area, (2) Coyote's Jar (a human Creation mountain), (3) Crystal Spring, (4) Black Butte, (5) Red Tail Hawk origin spot, (6) Arrow Canyon Range (which has extensive pecking panels in the canyon, an associated Mythic Time story regarding the range itself, and was the site of an 1890 Ghost Dance), (7) Potato Woman (a Creator Being in the shape of a long ridge extending from the Mormon Mountain massif), and (8) the Salt Cave at the junction of the Muddy (Moapa) River and the Virgin River. Delamar seasonal lake is hydrologically and ceremonially connected and integrated into the larger Pahrnagat Valley systems.

Water

The Delamar Valley SEZ American Indian study area and Pahrnagat Valley always have been connected culturally and hydrologically. Delamar Valley sits higher than Pahrnagat Valley causing water to flow from Delamar Valley into Pahrnagat Valley (Eakin 1966). The Delamar Valley SEZ American Indian study area contains a large playa that drains from the north to the south and into the southern portion of the valley where a large and usually wet lake is located. During wet periods, the large wet playa lake overflows to the south, where it meets with the Pahrnagat Valley hydrological system. From there, the water flows to the Muddy River, subsequently into the junction of the Virgin River, and then to the Colorado River. The last junction is currently submerged by Lake Mead. The Delamar Valley hydrological system is fed by surrounding mountains such as the Southern Pahroc Range to the west and the Delamar Mountains to the south and east. Notable peaks are Lookout Mountain, Big Lime Mountain, and Chokeycherry Mountain— all bordering the eastern edge of the valley.



Figure 9 View of the Southern Portion of the Delamar SEZ from Point of Rocks with Water in the Distance

The water flow underneath Delamar and Pahranaagat valleys is linked together by the Carbonate Aquifer. This aquifer is not characterized by one master flow system, instead the local topography of the region breaks up the groundwater flow into a number of regional, and sub-regional flow systems. For example, Cave Valley, Dry Lake Valley, and Delamar Valley are in the White River Subregion (Bredehoeft 1997), which outflows to the Pahranaagat Valley. Although scientists have only recently lent credence to this theory, the Native American people have always believed these water sources to be connected. The strong presence of water babies connects the Delamar area to other water baby sites. One Indian man stated that the water babies travel through these underground waterways.

Geology

The Delmar Valley SEZ American Indian study area has a bed rock that consists of mostly limestone and dolomite. Other parts of the bed rock are Paleozoic shale, sandstone, quartzite, and volcanic tuff. The valley has been filled over time with lacustrine deposits of silt, sand, and gravel from the surrounding mountains. The deposits were a result of Pleistocene lakes that filled the area. In more recent geological history, stream runoff has filled the lower lying areas with similar sediments (Eakin 1963). Large outcrops of volcanic hills dot the playa and fade up into the base of the mountains in the southern portion of the valley that surrounds the playa.

The topography of any place, area, or region speaks to its purpose according to the beliefs of Numic-speaking peoples. The inherent purpose of the land was defined during Creation and can be read by Indian people who share culturally-defined place logic. An earlier chapter in this report was devoted to describing this place logic and its epistemological foundations however, given the special geology of the Delamar Valley SEZ American Indian study area, it is necessary to discuss this ideology. The energy of the world (called Puha) was placed at Creation in all elements of the world (water, rocks, wind, animals, and plants) and both were then organized in special ways by the Creator and by the elements themselves who also were given agency—the ability to move to where they wish and do what they want. When powerful elements come together in a place, area, or region, it is understood that this is where Indian people were intended by Creation to come in order to conduct ceremony and seek advice or additional power. The key to interpreting such places or areas are the visual juxtaposition of powerful elements and the associated viewscapes. The high snow capped mountains, wide valley, black volcanic ridges and outcrops, isolated steep sided butte, and pure white mud flats of the seasonal lake constitute the primary elements that have been placed together in the Delamar Valley SEZ American Indian study area. The viewcape from any of these features contributes to the cultural importance of the place. The viewcape from the steep sided butte east of the petroglyphs was noted by tribal representatives as especially interesting and Turtle Butte captured the attention of Southern Paiute consultants as a potential location for vision questing. Tribal representatives are eager to return to this area for further investigation.

The Delamar SEZ American Indian study Area is linked in a variety of ways to the well documented spiritual landscape of the White River, Pahranaagat Valley system, the Muddy (Moapa) River, and subsequently the Virgin River. When ceremony or power seeking is successful at such places, they are selectively marked so that future human visitors can more

fully understand the purpose of the place. Offerings are left at such places as are prayers of placation and gratitude. Both remain, like the physical markings, to be seen and heard so as to indicate the meaning of the place as it was defined at Creation.

Evidence of Previous Indian Use

The Delamar seasonal playa lake area has been used by Indian people for thousands of years. This is evident in part, by the large number of heavily weathered and patinated rock peckings located at three places along the eastern side of the volcanic ridge that extends into the seasonal playa lake.

Among the hundreds of rock peckings located along this ridge, it is important to note that many of the peckings were water babies (Figure 10); powerful spiritual beings according to Numic epistemology (see the Ethnographic Comments below in this SEZ analysis). One pecking of Ocean Woman's net occurs alone on a large rock cliff face that defines a moderate size flat area located near the top of the volcanic ridge (see Figure 11). This location is well above all other peckings and is the highest and last pecking on the steep sided volcanic ridge. Ocean Woman is linked to the Creation of all humans and peckings of her net only occur at ceremonial places.

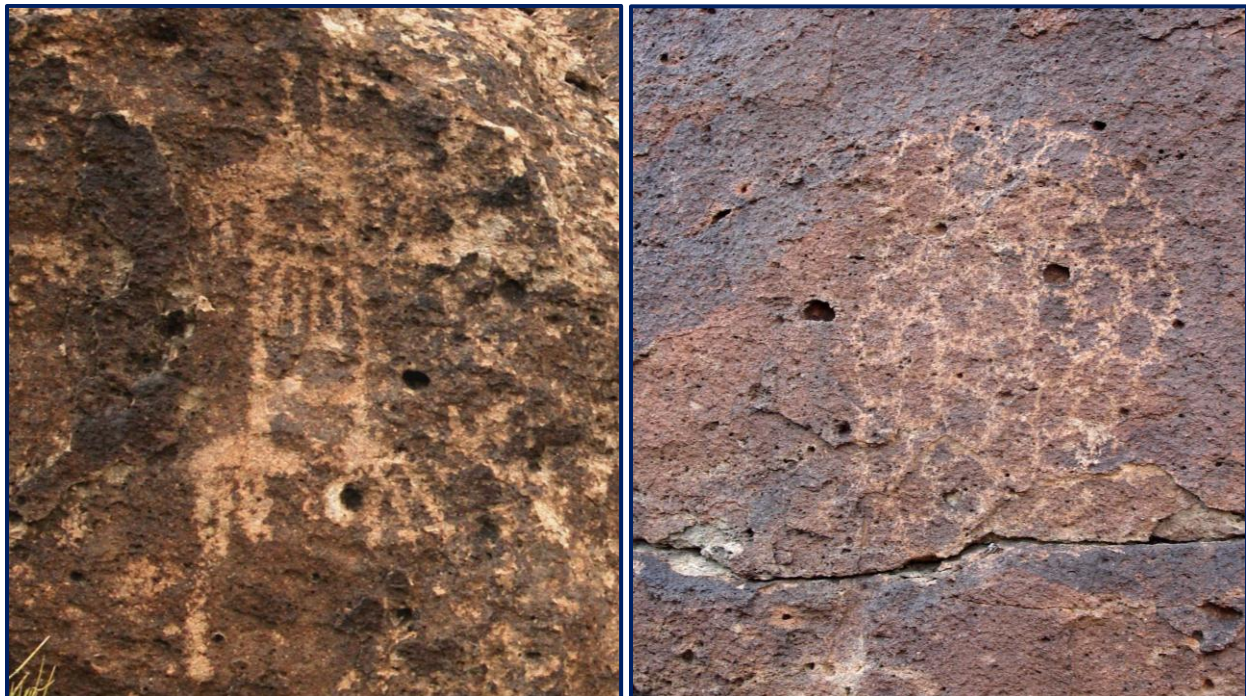


Figure 10 Water Baby Pecking (left) and Figure 11 Ocean Woman's Net (right) at the Delamar Valley SEZ American Indian Study Area

Another ceremony-related pecking is the *tapitcapi* (Figure 12), or Knotted String (Stoffle et al. 2004). It is displayed along and incorporated into other peckings. Tapitcapi peckings tend to occur at places where medicine men or pilgrims travel. The tapitcapi is associated throughout the new world with spiritual ceremonies and other important events. In the Andes it is called the

quipu. It was the device that permitted the coordination of the 1890 Pueblo revolt against the Spanish.



Figure 12 Close-up View of Tapitcapi

A pecking known as “the Twins” occurs a few times at the third site location on the volcanic ridge. The meaning of this pecking is still being discussed by Indian people, but it does appear clearly at the downstream outlet of the Pleistocene Lake, known today as Maynard Lake (see Figure 13). This place is known as the Red Hawk origin spot. The Twins are also seen at a painting in a culturally important cave in upper Kanab Creek in Grand Canyon region of northern Arizona. One suggestion was that the Twins represent the Salt Song sisters who participated in the formation of the trail to the afterlife that is traveled through a thousand miles of spiritual and physical paths and places.



Figure 13 Twins at the Red Hawk Origin Lake (left) and Figure 14 Twins at the Delamar Valley SEZ American Indian Study Area (right)

The current study was not intended to provide a full interpretation of all the cultural resources associated with the Delamar Valley SEZ American Indian study area, however Indian interpretations do present a possible explanation of the traditional functions of the three rock pecking places along the volcanic ridge. It is important to note that the great majority of the volcanic ridge contains no peckings at all. The three pecking areas discussed in this SEZ analysis were chosen for a specific purpose and each has a unique function. At the tip or what is called Point of Rocks, the pecking panels were identified as providing directions either to travelers passing through the area or to travelers using the area as a destination. For either type of travel, it was a point of prayer. The second pecking area centered on the large boulders had a few pecking and an abundance of grinding slicks. It was interpreted as a place where people stayed and prepared plant or paint materials for ceremonies. It may have been a place of prayer before people left for a destination. The third and very large pecking area has what amounts to hundreds of pecking of various sizes, styles, and locations. These pecking are delineated from side to side and from top to bottom of the ridge and only occur together. This place was for ceremonies which could have been conducted on the ridge at this location or this was a preparation area for an event that could have occurred elsewhere, such as the steep sided butte in the seasonal lake.

Ecology – Plants and Animals

The Delamar Valley SEZ American Indian study area lies within the Central Basin and Range Level III ecoregion, an area characterized by a diverse collection of arid internally drained basins, mountains, and playas. Within the elevation of the SEZ American Indian study area, from about 4,540 feet (1,380 m) to about 4,920 feet (1,500 m), the area demonstrates mixed shrub communities and sparsely vegetated saline playas. The area is also described as part of the Great Basin Desert Scrub biome. More specifically, the sites designation as Tonopah Basin Level IV ecozone reflects the area’s transition between the Great Basin and the Mojave Desert, incorporating various elements of both ecological forms. Due to its proximity to the Pahrangat Valley, the Delamar Valley SEZ American Indian study area reflects greater similarity to the Mojave desert than locations further west in the Tonopah Basin. The dominant land cover type in the SEZ American Indian study area is defined as Inter-Mountain Basins Mixed Salt Desert Scrub, which is characterized by an open-canopy and diverse, co-dominant, low density shrub communities with high presence of saltbush (*Atriplex spp.*) and sagebrush (*Artemisia spp.*). The understory of the mixed desertscrub is composed of perennial and warm season grasses. Inter-Mountain Basins Playa land cover also factors centrally in the study area, with absent or very sparse vegetation due to high salinity and poor infiltration of sporadically flooded areas.

During multiple field visits, Native American representatives identified 19 traditional use plants within the proposed project boundary. Table 2 provides readers with the common, scientific, and Southern Paiute names for each plant identified.

Common Name	Indian Name	Scientific Name
Banana yucca	uusiv, wiisiv	<i>Yucca baccata</i>
Big sagebrush	sangwav	<i>Artemisia tridentata</i>
Bud sagebrush	kuh- <u>eeb</u> tah- <u>cun</u> -oh-guah, kuh- <u>wepit</u> -tuh- <u>cun</u> -o- <u>guah</u>	<i>Picrothamnus desertorum</i>

California barrel cactus		<i>Ferocactus cylindraceus</i>
Creosotebush	yatumb	
Desert globemallow	tupwiv	<i>Sphaeralcea ambigua</i>
Desert Indian paintbrush		<i>Castilleja angustifolia</i>
Desert trumpet	papakurum	<i>Eriogonum inflatum</i>
Fourwing saltbush	skump, tono, murunibi	<i>Atriplex canescens</i>
Greasewood	tah-uh-be, toh-no-be, yah-tamp', tone-oh-bee	<i>Sarcobatus vermiculatus</i>
Hairspine pricklypear	usivuwits	<i>Opuntia polyacantha</i>
Hedgehog cactus	usivuwits	<i>Echinocereus engelmenii</i>
Indian ricegrass	wa'iv	<i>Achnatherum hymenoides</i>
Indian tea	yatup	<i>Ephedra viridis</i>
Joshua tree	tachæmpi	<i>Yucca brevifolia</i>
Mojave yucca, Spanish bayonet	tachumb, u'vimp	<i>Yucca schidigera</i>
Rubber rabbitbrush	s'kump	<i>Ericameria nauseosa</i>
Shadscale	oavi, kakumb	<i>Atriplex confertifolia</i>
Winterfat	boo-see-ah-wah-be, she-shu-bah	<i>Krascheninnikovia lanata</i>

Table 2 Traditional Use Plants Identified in Delamar Valley SEZ American Indian Study Area

The presence of animals in an area contributes to the overall cultural importance of the Delamar Valley SEZ American Indian study area to Indian people. In Numic culture, animals factor significantly in songs, stories, and ceremonies. Animals were also important food sources and their fur, bones, and feathers were used in construction of utilitarian items. Animals identified in the following table were believed to inhabit the SEZ American Indian study area. Some of these animals may physically and/or spiritually live in the study area. During multiple field visits, Native American representatives identified 42 traditionally important animals within the proposed project boundary. The Table 3 provides readers with the common, scientific, and Southern Paiute Indian names for each identified animal.

Common Name	Indian Name	Scientific Name
Mammals		
American badger	ʉnampʉtsi, Hoon, To-chi-e	<i>Taxidea taxus</i>
Black-tailed jack rabbit	Kaam, Kaamæ, Kamuntsi	<i>Lepus californicus</i>
Bobcat	Tukupʉts, Tukupits	<i>Lynx rufus</i>
Coyote	Yoxovwits, Yoxovʉtsi, Sʉnangwavi, Tʉrasʉnav, Tʉrasinav, Sin-nav, Shin-nah-ab, Tʉrasʉna'av,	<i>Canis latrans</i>

	Turahsunav	
Desert Cottontail	Tavuts	<i>Silvilagus audubonii</i>
Gray fox	Tavangwaimpitsi, Sin-nants, Tah-vahn-set, Hon-za, Onsi'its, Onsi'ikarum	<i>Urocyon cinereoargenteus</i>
Kangaroo rats	Pi-yu-ah, Tah-we-tat, tom-we-a-tats	<i>Dipodomys</i> spp.
Kit Fox		<i>Vulpes macotis</i>
Mountain Lion	Tukumumutsi, Piaruku, Too-koo-puts, To-ko-mo-muts, Too-koo-mo-munch	<i>Puma concolor</i>
Mule deer	Tuxia, Tuuyi, Tuhi, Tuhuya	<i>Odocoileus hemionus</i>
Pocket gopher	Muyumpitsi, Mwe-em-puts	<i>Thomomys</i> sp.
Pocket mouse		<i>Perognathus</i> sp.
Porcupine	Yungumpatsi, Ye-hum-puts, Yuch	<i>Erethizon dorsatum</i>
Pronghorn	Wahn-ze, Wongs, Waknch, Waantsi	<i>Antilocapra americana</i>
Red fox	Tavangwaimpitsi, Sin-nants, Tah-vahn-set, Hon-za, Onsi'its, Onsi'ikarum	<i>Vulpes vulpes</i>
Rock squirrel	Skoots	<i>Spermophilus variegatus</i>
White-tailed antelope squirrel	Tava'atsi, Ta-va-run-quits, Ta-bats, Ta-vats	<i>Ammospermophilus leucurus</i>
Woodrat	Kaatsi , Kahts, Kaats, Kah´	<i>Neotoma</i> sp.
Birds		
American kestrel	Karin´ang kats, Te-ze-nah-kahts, Kwan-an-tsits	<i>Falco sparverius</i>
Burrowing owl	Muku'uts	<i>Athene cunicular</i>
Common raven	Atapats, Atakots, Ha-ta-puits, Ah-tah-pah-ki'p, Tah-kwahts, Ah-tah-pwits	<i>Corvus corax</i>
Golden eagle	Mung, Kwanants	<i>Aquila chrysaetos</i>
Great Horned Owl	Moopats, Moo-oo-put, Mo-o-puts, Moo-e-pwits, Muupats	<i>Bubo virginianus</i>
Gambel's Quail	Akar	<i>Callipepla gambelii</i>
Horned lark	Turanwintsi´tsi, Nava witsi´ts, Te-we-wit-se, Te-rah we-cha-its, Ne-vow-we-tsits	<i>Eremophila alpestris</i>
Hummingbird	Mu´-tu-chats, Mootuchats,	Family Trochilidae

	Mo-too-tsahts, Ah-to-e-tsets, Moo-tin-zits, Mutuchæts	
Killdeer	Pantæxæits, Pahn-tig-wits, Pah-re koo-its, Pa-roo-goo-e'ts	<i>Charadrius vociferous</i>
Lesser nighthawk	Tuwawitsi'ts	<i>Chordeiles acutipennis</i>
Loggerhead shrike	Tah-cho-noint, Tun-dun-nois	<i>Lanius ludovicianus</i>
Mourning Dove	Iyov, Ayov	<i>Zenaida macroura</i>
Northern mockingbird	Yamp	<i>Mimus polyglottos</i>
Red-Tailed Hawk	Ta-ah kwah-nahts	<i>Grus canadensis</i>
Roadrunner	Ko cha bo'ki, Oo'ts	<i>Geococcyx</i> sp.
Rock wren	Too-ching-ing, Tæmpikixots	<i>Salpinctes obsoletus</i>
Say's phoebe	Chu-huv	<i>Sayornis saya</i>
Turkey Vulture	Wikumpætsi, We-koo-puts, Week	<i>Cathartes aura</i>
Western kingbird	Chæxæ'uvi, Wahts-koo-its, Too-pe-wats	<i>Tyrannus verticalis</i>
Reptiles		
Desert horned lizard		<i>Phrynosoma platyrhinos</i>
Desert tortoise		<i>Gopherus agassizii</i>
Lizards	Pompotsatsi, Moxwia, Sæxupætsi, Tsahng-ahv	Various species
Long-nosed leopard lizard	Too-ar-rah, Neu-mah-zing-ahts	<i>Gambelia wislizenii</i>
Rattlesnake	Toxoavi, Tanakitsi, To-ko-ahv, To-go-av-ve,	<i>Crotalus</i> sp.

Table 3 Traditional Use Animals in Delamar Valley SEZ American Indian Study Area

Native American Comments

The Delamar Valley SEZ American Indian study area was visited once by Southern Paiute tribal representatives during the 1983 IPP and four times during the Solar PEIS Ethnographic Study. The Solar PEIS field visits occurred in November 2010, March 2011, May 2011, and July 2011 with Indian representatives from the Moapa Band of Paiute Indians, Pahrump Paiute Tribe, and the Paiute Indian Tribe of Utah. During these visits, 35 interviews were conducted. This total includes two Native American Cultural Resources forms, four Ethnoarchaeology – Rock Art forms, three Cultural Landscape forms, and 26 personal statements from the involved tribal representatives. Both a SEZ-based seminar and an oral history accounts were provided. A greater understanding of the Delamar Valley SEZ American Indian study area was developed with the previous finding from the IPP, conducted in 1983 with the help of unregistered Paiute representatives from Caliente.

The interview data presented in the following sections have been divided by tribe. This division is intended to strengthen the Native American interpretations by providing each tribe with equal space and opportunity to share their own cultural concerns and recommendations.

Intermountain Power Project Interviews – 1983

The following ethnographic information was collected during the 1982 and 1983 IPP study. The IPP study visit occurred with Southern Paiute tribal representatives from the Moapa Band of Paiute Indians and the Kaibab Band of Paiute Indians. Native American interview information from previous IPP ethnographic studies were conducted by members of the current University of Arizona (UofA) research team, who were then located at another university.

Many people used to live at the south end of the valley. An unregistered tribal woman from Caliente spoke of hearing about people traveling down to Moapa and visiting the people that lived on the south end of the valley, just south of Delamar Dry Lake. She commented that these people, Pahrnagat Paiutes, were eventually chased out of the area and that no Paiutes had lived there for a long time (Stoffle and Dobyns 1983:203, 206).

MX/Missile Defense EIS

The following ethnographic information was collected during an environmental impact assessment of MX missile defense project by researchers from Facilitators, Inc. Their data highlights long term Southern Paiute use of the current Delamar Valley SEZ American Indian study area.

Delamar Valley was formerly occupied on a seasonal basis by Southern Paiutes and is characterized by high site densities. Although only five sites associated with historic Indians have been plotted in the archaeological record, historic accounts and Southern Paiute oral testimony indicate that this region was a major stopping place on the annual migration routes of individual families and clans. The valley is known to contain extensive settlements and burials in both lowland and bajada zones, a Southern Paiute battle ground, two rock art sites, and contemporary pine-nut gathering areas. All of these cultural resources are highly sensitive to members of the Moapa Reservation. The conceptual layout used for this analysis would directly impact two known sites. The valley area to be disturbed by construction activities however is expected to contain a large number of unrecorded settlement and burial sites. The potential for direct impacts to Southern Paiute cultural resources on the basis of proximity is therefore high. Indirect impacts to sensitive sites and areas are also predicted to be high due to: (1) the improved accessibility to the valley provided by the DTN and cluster roads, (2) the close proximity of resources to these roadways and to potential recreational attractions such as Delamar ghost town, and (3) the proximity of the valley to the Coyote Spring OB site, and its associated in-migrant population (Facilitators, Inc. 1980 5.7-5.8).

Paiute Indian Tribe of Utah Solar PEIS Interviews

The May 2011 field visit to the Delamar Valley SEZ American Indian study area with PITU representatives was interrupted by three days of heavy rain and snow. As a consequence, even the IPP road from US 93 to the Delamar Valley SEZ American Indian study area was impassable and the lake level rose significantly. Thus an alternative approach to sharing ethnographic information was decided upon given the inclement weather.

Water Babies

For one day the PITU representatives and the UofA research team watched and discussed slides of the Delamar Valley SEZ American Indian study area. This proved to be an informative seminar as seen in the comments below.



Figure 15 PITU Tribal Representatives at the Water Baby Seminar

The presence of water babies in the Delamar Valley SEZ American Indian study area is critical to how the area has been interpreted and traditionally used. Water babies are powerful spiritual beings that are associated with water and volcanic places. They live in flowing water of many kinds, including rivers and artesian springs, and frequently travel through both natural and manmade hydrological systems. Water babies are considered to be female and are often described as around three feet high with long hair and hard shell-like skin. The tremendous power of water babies is complex, making them very special spiritual helpers for a shaman (*Puha'gant*), but also incredibly dangerous for those unable to control the power. For this reason, water baby spiritual helpers were largely avoided by uninitiated people and were only associated with extremely powerful spiritual people or Rain Shamans. Their connection with water made them very valuable for rain making activities.

- *The water babies come from an underground source that is no longer there. The source is hidden but when it gets really wet, they can come back out again. They come here when they are needed. It is even like this on the Muddy River; they can come back whenever*

they want to. I believe they come for a purpose. When you talk about the fear of water babies, it's to remind people of the strength of them. They do things to people to remind them of the strength of water babies and to remind people what can happen if you do not do what you have been taught.

- *I think it is possible that Paiute people will want to acquire water babies and get their help, but I think it will be a long time from now. There really aren't many people with medicine that is very strong. I have a little bit of medicine, and there are a lot that can just feel it. But we aren't strong enough to have that kind of power or connect to that kind of a thing. It will take time for people to learn and to be able to use that kind of stuff. So I figure it could come back, but not soon. Maybe the youth that we teach here will be able to one day connect with the power at this site.*
- *Water babies were not good. If you saw a water baby, you would be dead. Around that area coming into Caliente from the north, that's where your water babies used to be, a long time ago. James Yellowjacket told me that. He told me that because one time, my uncles were driving through there, they had a Buick and they were coming down into Caliente. John was driving and he said he went around that turn, where that little motel thing is, that white house, and the Buick went up into the air like that and it flipped backwards onto its top. And James was saying...James was one of those old-timers...He was telling us that with our grandma Mable because we were going there to get that Buick. He said all along there in that area to the side of the road is where they were. They had those, what are they called, those plants that smell so good...water crest with the white flowers on it. That's where those water babies are. You can tell where the water babies are because they have those lilies, the white and pink ones. You better not stay at that place with water babies over night, because they will jump inside of you.*
- *Water babies can change themselves. These people, they went pine nut picking and the lady left her little baby there at camp for her relatives to take care of and she heard a baby crying. The baby sounded just like her baby...They sound really sweet...She went over to it and the baby looked just like her baby. So she went and picked it up. She thought it was hungry so she started to let it nurse and it was a water baby. It wouldn't let go.*
- *There's a legend that goes around through the Paiute people about water babies. You know that water, over by Hurricane, that comes bubbling out where the kids used to go swimming, one time, some Kaibab people came over because they needed onions and they camped over there. The lady told me...They took off in their little car and said, "Hurry up! There's a water baby crying over there." They didn't even bother to go over there and check, they just took off. Isabel told me that story, she said she didn't like that area before then.*
- *Isaac used to tell me that all the water that was on the earth at one time started going down and it left puddles all over. Later on, water babies used to come into those areas. When tribes used to travel through, they couldn't stay in those areas because the tribes didn't want anything to do with them. And you could really hear them crying back then.*

- *I think that this is a place where medicine men would acquire water babies.*
- *Water babies are connected to Delamar playa because at one time, this area held a lot of water. Water babies are still here underground with the water. Sometime we come back as different things like birds, animals, etc; water babies could come back with the water too.*

Indian History

On the second day, the group traveled to Pioche, Nevada to visit three places containing documents, artifacts, and photographs relevant to the Delamar Valley SEZ American Indian study area (Figures 16 and 17). These included the historic court house, county museum, and library. The documents and especially the photographs of Indian people elicited oral accounts of Indian activities during the Historic Periods. Many of these are directly relevant to the interpretations of the Delamar Valley SEZ American Indian study area and so are included.

- *We were born here. Bill used to be an assessor. That's my grandpa; that's Eagle Valley John. This is Pete and his daughter Maggie, she's my mom's mother and he's the father of Bryant's grandma. That's the picture I was looking for; I was going to show him. If Pete is Maggie's dad, then he's my great grandfather, and Maggie would be my grandma and Eagle Valley John is my grandfather. That's mine and Arthur's mom's grandpa and grandma.*



Figure 16 UofA Ethnographer and PITU Representative Viewing a Photograph of Her Relative in the Delamar Valley SEZ American Indian Study Area

- *Eagle Valley John had a brother Willie John, and he married Maggie's sister Minnie, and that's Bryant's great grandma. But the Little's, they lived out there at Eagle Valley for years and years and these two were high school sweet hearts and they married. Their names are Donna and Ken and her maiden name was Boden. But after school we used to get in front of her house, her and her sister Carla, and we'd roller skate because they had a paved sidewalk at their house. [This book is Treasures of the Hills: Families of Pioche Nevada and nearby Mines, Ranches, and Valleys.]*
- *There's a picture of them where they have an Indian guy where they were going to amputate his leg. [That's at the Delamar Mining Camp?] Yeah, it was out there. [So this is one of your grandfathers and your other grandfather was the one who was at the amputation?] Yeah. That's my grandpa Charlie Pete. Let's see, from left it says Indian Kino, that's the medicine man I was talking about yesterday. That's my grandfather, right there, Charlie Pete. [With the white sleeves?] Yes. Kino, that's when he was younger. He used to come to the house, like I said, he'd come to visit my grandma and grandpa and stay there with them for a while. He'd just go from reservation to reservation and when he was older he was blind, but he'd come on the train and he'd find his way out to grandma and grandpa's house. He had a little cane and they were putting in a new sewer for the hospital and they had planks across the holes and he had his cane and it guided him across. He'd feel that and he'd just walk right across the plank. Isn't that something? He always managed to find his way around, anywhere he was going.*



Figure 17 Paiute Tribal Representative Viewing a Photograph of a Leg Amputation

[Here's the picture of the Indian Doctor.] That's when they were taking his leg off. [That's Kino and that's my grandpa Charlie.] Kino comes from over here in Eagle Valley and his sister is my sister's grandma. She drifted over into Arizona and married a guy over there. This is Kino and this is Darlene's grandfather here. This is when they were

cutting that guys leg off. I was just telling her, that's the way that it looked a long time ago.

Moapa Paiute Solar PEIS Interviews

This section contains statements made by Moapa tribal representatives during the March 2011 field session. These statements discuss the cultural importance of the Delamar Valley SEZ American Indian study area to Southern Paiute people.



Figure 18 Moapa Tribal Representatives

- *There is a place where they used to grind there food on the rock here. And this is the only good sign that we know, that can prove that the Indian people were in this area, and there's a lot of medicine here that we use for tea or stomach ache and I see it here and its growing real good. It's amazing to see something like this; you know the white people wouldn't notice this rock here that has two holes in it where they used to grind food. It's really good. I don't know what else we could find in here, the rocks are slick on one side and it's really neat how it is here. We didn't see any signs of the art work that people left and doing certain things here, but it's nice to see this here. Someone is building a corral here right by this place. I wish we could find more in this area but there ain't, there ain't to much of anything here at all to talk about, but it's neat though to see this. A lot of the medicine in here growing real strong and beautiful. It's amazing how things can grow in*

a certain area. And there's a water hole here in the rock that's got some water in it, it's real neat, a nice little place. At least we find something here, no Indian writings and stuff like that so I guess that's it here.

- *I found another shelter here where there used to be a camp and we found a lot of chippings of arrowheads, of where they used to make arrowheads out of and stuff like that at the other one over there the bigger one where they used to camp at. And this is a little smaller one here but it's got placed here where it seems like they had a fire or something in there, but it's a place for them to get out of the sun or whatever, and it's good that they had such place like this here. There is another little shelter up higher where they could stay and sleep and get out of the hot sun.*
- *It seems like they're staying to the east where the sunrise comes up and it warms up the side of the hill where they used to stay, so to me it seems like they knew what they doing when they were in this area. As far as that goes, I think they knew what they were doing and staying in this area and that. The Indian people were pretty smart, they knew what they were doing, and that's good to know these things and where they stay. I'm walking towards the north of this mountain and going alone to see if I can find anything else. Seems like the Indian people like staying on the east side of mountains and stuff like that. There's a lot of place on this eastside here where the Indians could be staying and living thought the summer and that when they come up into the mountains. It's pretty neat how this mountain is, it must have been a special place for the Indian people to come into this area and stay and gather up whatever they could find to eat and stuff like that. Yep, I see a lot of place here.*
- *They went from the ground up, which is symbolic of how we do medicine from the ground to the stars, Turtle Butte is interesting and maybe there is something there that needs to be look at, since it has a connection to the Point of Rocks. That spot has spiritual and medicinal power and purpose. Even though the rock seems the same, these are special.*
- *These power places are all connected. The medicine men use the stars to travel to these places and use them. They get more power if they visit them, but they can still use these spots with their mind. The medicine men know a number of these places and can use them when needed. There are similar places, like the Salt Song could get them at Gypsum Cave. It is not easy to get songs because they require a big sacrifice. If you learn a Salt Song from a person, it may leave you but if you sacrifice for it, then it never leaves you.*
- *The Point of Rocks is volcanic rock. That with the lake and the mountains all combines to produce a power. The geological features here are really unique. They speak to you if you are attuned to these things.*
- *These panels are connected to Pahrnagat Valley and to Hiko where all those things have happened, the massacres and because there were so many people around here so long ago.*

- *This would be a good place to get power because you're away from everybody. Getting power is more of a sacrifice than a luxury, so you want to get away, you want to sacrifice yourself. You want to be able to say, "Yes, I am strong enough to use the power."*
- *I think when all these petroglyphs was done was when they had a lot of water still in that lake, like at Pahrnagat. But water is starting to diminish and there is not as much as there used to be. The dry lake is not as big as it used to be, from what I remember when I was little.*
- *But I see a mountain sheep here (petroglyph). It seems like the whites have been shooting at these drawings on the rocks that the Indian people used to do. And they're destroying it, not matter what. They say that nobody should be destroying these things, but they are. It's a bad situation to see this but I see this here now that they've been shooting at a lot of these rocks and stuff like that where the Indian writings are. And that's not very good, and there's a lot of them that's been done a long time ago and you can just barely see them so it's just not write for anybody to go shoot rocks and shoot these writings off. This destroys a lot of things for the Indian people because this is, for instance, it shows that the Indian people were here and it's just not any good at all if you want to know the truth. When there are writings on rocks likes this it proves that the Indian people were around here and it's not a very good sign of people shooting and destroying the writings that the old Indian people used to do, so I am going to stop here now and see if I can't find anymore.*



Figure 19 Transformed Medicine Men Peckings

- *We may come back out here again and do more research out in this area and see what else we can find in this area. I know this much, the Indian people were here. Even if the white man is shooting all the drawing on the rocks and stuff. There are a lot of places here where they could stay and there are shelters here in this area, and I think that these*

people were quite good at what they were doing here. Maybe we'll come back and in this area do more research because there are places here where they could have shelter from the cold and whatever. I guess this mountain side goes quite some way, so maybe I better just quite here and go back. It's a good place for them to gather up things, food and whatever they could find in this area. It might have been real good in the olden days, but right now our country is drying up. I guess there's nothing we can really do about all this, so I am going back and maybe we'll come back out to this area and find more stuff, I don't know. This area needs more researching, and there are a lot of place where the Indian people could stay in certain areas. What I see here, there is a lot of shelter in this area.

- *It's hard for me to see the dry lake bed turned into a solar facility. A solar facility would impact the power of the site. The site's power comes from the shape of the place. This is like the point of coming out of the earth and if it is changed, it will reduce the power. Also, many people will come in the area due to construction. There will be a greater access and people will come back and all those people will cause harm.*
- *I think the main concern of the Indian people is our wildlife, our mountain sheep, our turtles, our roots, Indian tea; whatever the Native American people ate at one time.*
- *People who are outside looking in coming in and taking pictures, graffiti, maybe taking some of the petroglyphs, digging, you don't know what they are going to do. So when they come in to do all this solar stuff, all of these people are going to be coming in and that's our biggest concern. There is already a lot of stuff happening in that area.*
- *If they built all that stuff up there, it would disturb all of those pecking.*
- *Maybe the youth that we teach here will be able to one day connect with the power at this site. A lot of these people don't even really know who they are, so you basically have to start from scratch. It won't be easy to teach people anymore because the people that do know about this stuff are getting fewer and farther between. But it can be done, and it has to be done. If things keep going the way they are going.*
- *People could return to here to gain power and rebalance the world. There are a lot of places like this, but it is similar to the plants, they are not the same. There is only one for you where you can gain what it is you need. Protection isn't about keeping people out, it's about acknowledging this place as a purpose. That purpose is to the point where you cannot understand why the things are being done the way they are. It's the power to bring the world back to balance, and most of the world doesn't understand that. That understanding is needed in order for us not to kill ourselves off. They're destroying the world for the convenience of turning a light on, and their destroying the earth. And the earth is their home! I see, from the past, where we are going. And we need to learn to go back to where we were. But we all need to see this.*

Pahrump Solar PEIS Interviews

This section contains statements made by a Pahrump Paiute representative (Figure 20) during the July 2011 field session. These statements discuss the cultural centrality of the Delamar Valley SEZ American Indian study area to Southern Paiute people.

- *We just came around the corner to this area called site 2. There are some peckings and a lot of grinding slicks. But there is really a predominant knob out here that's a volcanic knoll that seems to be really central to this area out here. It may have been part of the area and focal point for traditional doings. Rich wants to take me to another site here which I want to look at as well because it'll be interesting to see this knob from the other area. I think we can make it up there and it would be interesting to go up there and share some more thoughts from the top. One of the things I wanted to also share about the 2nd site at Point of Rocks was that there were little holes ground into the rock and they had little lines drawn around the outer edge of each one. Those are the ones that were used when they were doing doctoring for putting a stick in to take in or extracting the power through a stick out of the rock for the people who were doing the doctoring. When people were sick and all, the doctors used to put the sticks back into the rocks and then it would return to the mountains to help neutralize it. But they were also used when you needed to take power out of it. So that maybe another indicator of why this place is pretty significant.*



Figure 20 Pahrump Paiute Representative Sharing Thoughts on the Delamar Valley SEZ American Indian Study Area

Okay, so I am walking around here with Rich and we saw Ocean Woman's net as well as several water babies in this area. Everything is pointing towards that little volcanic knoll. It seems like this is a place where you would call rain because of the presence of water babies and the water that would be here that is flowing through that channel and underground. Secondly, there are the big horn sheep who are the communicators and

who bring the songs and the stories and medicines. They bring the power of the rain into this area. Thirdly, Ocean Woman's net. This is an area where it talks about our origin story. I mean it talks about how this world was created and how a long time ago, things used to be human beings. Right below Ocean Woman's net there is a rock shelter and a piece of chalcedony in there which is obviously out of place. The place is basalt and whatever else it is, but there is no other chalcedony around here. It's very loose soil on the bottom, so who knows what it under the soil.

We've seen a multitude of big horn sheep, we've probably seen more drawing of big horn sheep than what we saw originally because of the lighting. I was also sharing with Rich about panels and things and this place we are at faces that one knoll, which is central. It seems like it is the magnet for the area or the anchor for the area and everything that goes up. You can watch the storms and clouds rolling up to the north and all of that is key, this whole landscape is key, so to destroy that or put things up here is going to upset a lot of balance in this area because people are looking and use those. That's why that people use this. This is not a habitation site by any means, it's a powerful spot. And you can feel the power in this area. If those panels are down below, the concern is that your songs that you're singing across the landscape or stories that are told about the landscape are going to reflect off those panels and it will divert them the wrong way. That causes more disharmony because it isn't going the way it needs to go and we're just going to end up with a lot of problems because of that.



Figure 21 Mountain Sheep Peckings

We're here at the location where we found eight doctors or images that have the water baby hands; they're all on one panel. They're all looking over the entire valley. There is one that has two distinctive dark eyes in the middle. It's very intriguing because it's meant for you either as you come up or go down, you find different things. And for this panel I found the way that they may have gotten up here. We say the little people are the

ones who make these and they are able to get up here and all over. But this is definitely probably the biggest concentration of these kinds of things that I've seen in probably one of the most powerful spots in this little area where people came. They had to come here to gather to bring all that power to this one place. It's a very centered place within this whole valley and probably within the belief of Paiute people as well.

I was just thinking about this area here that has the different drawings, and there are differences between the drawings and images that are here. The variations of the water babies and the power come from this place. Along time ago, Indian people would come to a place like this and they would bring their own medicine, their own doctors, their own images, this would be a place where people would come to gather. So the one place where there were the eight images of the medicine men, it was a place where people would have to come to keep the balance in the area because if not then things start going crazy. This is a very interesting location because although it's a long hill, it's only concentrated where the volcanic flow comes down. This is where we are seeing these images. There are plenty of other surfaces where they could have gone but they chose these areas and you can truly feel the power of the place.

It is a place that is so significant looking at the twins, and they're armless, there were these things (inverse triangles), they were almost like areas to go in, so you go into the underworld or to another dimension, you can exit out of those as well. Anyways, those were right by the twins and it was something that was facing right towards that volcanic knoll over there, which I referenced earlier. And like I said, it's like a magnet for this area. It also accounts for why there are variations in some of these drawings. Some of these are extremely old and are beginning to be covered with desert varnish and lichen and things, but they are all the same kind of things but with variations. Of course in Paiute, we talk about the little people, the De-ju-gu-oos that are responsible for making to original drawings. They were for the powerful people who knew how to read and use those and they could grow from there. They were so highly respected and it's not just to avoid this area, but it's the power that is coming out.

The irony is that the solar project wants to take things from the sun 93,000,000 million miles away, and this place here gives out the equivalent power of the sun and goes just as far or farther than solar power does. So to come and develop a project like that over here by Delamar is really going to disrupt things because things are going to be diffused and things are going to get confused because you are going to have the sun coming down that will reverse things, changing day to night, night to day; also for powers and songs it's going to bounce off those panels so they might be deflected in a place and way it is not supposed to be. Again it is just a highly significant place. Every Indian person who has come here has spoken about this particular area. It's remote only because people choose not to come and move to this area. But for medicine people, they knew this area was central to everything and where you could come and talk and communicate to things, so again it's a very important area.

Solar Impacts

One of the things I was thinking about this whole time, we use the term Rock Art, a we have been trying really hard to get away from that art notion because it is more spiritual in nature, sometimes when we use the term rock drawings or whatever, it seemed to diminish what we were trying to tell people how important these things are. So that's my first comment. The next is in the existing text, it talks about how we are trying to state the significance of areas, like about water babies and how they're important and how they travel underground; when Rich and I went over there to Delamar yesterday, we were talking about other dimensions too, not just going under the ground, but it's things that happened. And this is important when we're talking about the landscape, we're talking about the impacts that this project is going to have, so they could say, 'well okay we'll move it a little bit north', that is still within the broader landscape so somehow, I think we need to share how this other dimensions, those are things that when everybody, these doctors, came together, you can tell in the differences in the images, a lot of them are representing close similarities, people came from all different directions and the stuff that they were using was going out in all directions. So the medicine and the power was going out in all of these different directions including that butte that once you get up there on the butte, those songs, stories, prayers, they will go to the top of that butte and they can scatter just as easily as are visions. So basically the songs are the eyes of the people doing the ceremony. So it seemed that there was a little of this ceremonial notion that was missed. Also, like in my comments yesterday at Delamar, there are several things that reflect on that, that place was like a magnet, and when you get there on top of that, you get away from where they drawings are and you go up on top of that butte, you look back and you can see two very distinct volcanic flows of where the boundaries of where this one site is. People knew that. They could see that. The doctors maybe they did have to the top, maybe they did it spiritually and then looked back and that's why they could see the area where they need to center their activities around. The little people that I mentioned yesterday on the tape, they knew that area and they still watch over it. They were there even yesterday because I remember almost seeing one yesterday, but they are so fast you only glimpse them out of the corner of your eye.

The other was that when there was that first rock art, or rock drawings when you first enter by point of rocks, and the ones that people identified as a kind of map, it's not just a geographically map, it's a spiritual map too, because there is a headless man that is there too. That's crossing through different dimensions, those hour glass figures that keep on reappearing, they are around unique drawings. That is what I was talking about yesterday how they could be a portal or entrance into the other dimension, one going up one going down, but it doesn't necessarily mean going up and down, it can also mean entrance and exit. So it doesn't mean necessarily, just because one is facing vertically, that you are going down below the ground. And because some of those weren't associated with water babies either. That's why when folks were using their power, they need to use all of those different things and looking all those different ways through the portals, looking in all directions, looking up and down, and seeing way into the past, the present, the future. Where a person is, the physical place where a person is or the doctor may have been, all of that needs to be incorporated. Those are actually mentioned in the

sequence of prayers that we do. Whenever you enter into or back out of you also have to make sure you are responding to or taking care of and addressing and giving your thanks to those things because everything you do will impact things, even though it already happened a long time ago, you can still have those things re-surface. This is why you have to be really careful what you do because one of those dimensions affects any of the others.

The other comment I had was about the grinding slicks that you find. Those were clearly not places for daily subsistence but maybe for cultural and spiritual subsistence. And so those are the types of areas that you would use to prepare things. There is also a big rock there, got a good picture of rich there that shows the contrast between showing where he is laying on the rock and this big white area that too was an area used for power. Moreover, if you are laying on that rock and look straight up there are two other rocks that stand straight up like pillars. We were talking to some other folks on another project out here and they were referring to those rocks as like sentries. Like the guards that are watching over in that particular area. You have to look in between those guards to look into that other dimensions, wherever you are talking about or using. I think those kinds of elements, and if we could really focus more on the spiritual aspects of this, I think that is what is really going to go a long way.

And I think the other thing, when you are looking up and down the valley, you are going to see the natural washes and drainage, when you get up higher they are even more distinct. Some of those are very deep, and it shows that there has been lots of water that comes through here and anytime water flows; you have spirits flowing through there.

And time you have wind going through that valley you have spirits coming and going; anytime you have the animals there you have the spirits within the animals; anytime you see the rocks around, you have the spirits that are inside all of those. Looking at the spirituality really ties in the entire area. And this specific area is so unique and I think for us (Paiute people), those trails that came over here from area Pahrump into these areas over here, Pahrnagat was an important area, Moapa was an important area, Delamar you can see the natural drainage that came down from the Pleistocene lakes that were coming through there and were draining into Pahrnagat, Hiko area. But you can see all of the drainage coming through there and that's the flow of the spirits. The spirits then congregated in Delamar. They then eventually moved into Pahrnagat and to key places for people and even the doctoring that went on in Pahrnagat. I mean, they were very powerful people and I am sure those people had the knowledge of Delamar.

It is because of the similarities that you see, not looking at it just from a resemblance, I mean there are some resemblances, but the thing that is unusual about Delamar is that you have all of these spirits that are there. As oppose to say, let's look at Pahrnagat man, there are some there but they are not as abundant. That could have been one of two reasons. One, that could have been because people from Pahrnagat came up to Delamar or all the stuff from Delamar, as the water flowed down into Pahrnagat, all of that along with all of that big power, came and was then used and manipulated by the keeper, the head guy at Pahrnagat. Everything has to do with view. At Delamar, you

look at the butte there and you get the great vista, that way you can see all the way over to Pahranaagat. Actually you can see some of the mountain ranges that look like they're probably to the west of Pahranaagat. When you get a little bit south of Pahranaagat, then you're looking at stuff over there in Moapa and eventually you are going to be seeing things over towards Vegas and towards the Spring Mountains and the Sheep mountains. All of that really ties in together and makes the landscape so important. If you look at it from a cultural perspective of trying to now put in some solar panels into this area, you can imagine the barriers and distractions that would be there, just as if they were in the middle of a city in a congested area. There would be a kind of spiritual congestion. Maybe congestion is a bad word for spiritual, but that same abundance of activities, cultural and spiritual are going on all around. That's what happens with these panels, they are going to start upsetting the balance of that. Songs may get echoes in them when they shouldn't be getting echoes, they may be getting diverted into a different angle that they shouldn't be going, in the same way when animals talk, it's going to be distorted. The mountains, the rocks and, everything within the landscape are going to be coming up against these road blocks in a way that we have never had to deal with before. We have no way to deal with this because we have always relied on the vast vistas that we have. See that's one thing that people have always talked about especially in Nevada. When you're doing doctoring, you need those big long areas where you can see because you are calling things from extremely far away, something's could even be in the past that you need to call upon and bring into your doctoring activities.

Another is that some of the rock shelters that are there. These shelters are not necessarily a good description because shelters are like trying to protect you from something, and these for doctoring. These shelters aren't so much for protection, but for acoustics, the line of sight, sometimes it's just the placement of the things that are around which is why those were used and that's why you're not finding any of the artifacts that you would with shelters. These aren't the type of places where people hung around. It was the type of place where people were really revered and they had to conduct various ceremonies with as little disruption as possible.

The net, like Ocean Woman's Net that is there is really one of the ways that it helps to define Numic-peoples territories. Because you see that all across the Paiute country and you see that in various significant spots. And for us in Pahrump, there are some that are in the Spring Mountains that are very close to the spot, Mt. Charleston, but also all throughout, and you can find them in key locations. Again, that real helps to define, what we are and who we are and where we're from. But you have to also multiply that by all the different directions and things that I was talking about.

The other thing that is kind of disconcerting is the BLM signs I see there. You have some of them plopped right in the middle. The one site in Delamar, past the point of rocks where all the water babies are, unfortunately there is a road and you can almost pull in there, so it's kind of self-directing how to get there. This is bad; more than just a fence and a sign are needed. Even though it said BLM law enforcement will come by, we didn't see any this weekend. All the times that I have been out here I have yet to see BLM law enforcement coming out. I think that's one of the problems.

The only reason they would come out is if they knew there was a crime like looting, or if they needed to bring something back, then they would come out here. But typically because they are so far removed from here and their busy doing whatever they're doing, they have neither the time nor the resources to come down into the area.

Another thing as we looked around, you could see the IPP power line project going down there and off in the distance. There is a road for it where you can see people driving by and these are part of the distractions that we have to deal with because again, when people were here praying and singing songs in the old days, we didn't have people driving by, you didn't see the artificial dust coming up. These things in themselves become distractions.

The panels that are going to be taking and essentially killing the sun, you know the sun can die. Astronomers talk about how it is a star that will eventually die out and we know that is in our stories, how powerful the sun is, how it can make things disappear, how it has the power to kill things, it can drain water, it can make animals and their habitats change, make the flows of weather change. When there are eclipses, those times are extremely powerful times when people would do doctoring. But it's truly people that know what they are doing, and it was something that was never taken lightly. And that's what happens when you in an eclipse for example, when there is a solar eclipse and it look shady or dark out, that's what will happen with the solar panels. The solar panels will reverse things. They will capture and drain the sun by trying to collect it and then transform it into power, another kind of power that it wasn't intended for, and then it shoots it across a landscape. As it's doing that, it's affecting the weather; people today talk about climate change, all of this is contributing to those types of activities. So when you start to drain the sun, you are capturing the sun, it's no difference then catching a light and holding it in your hand or a flashlight, so that's what will happen. It will change our world, our dimension. It will confuse the spirits it will confuse the animals, it will confuse the songs, it'll confuse the stories.

When we have our songs that are supposed to be sung at midnight, but now you have something that has captured the sun during the day time, there are certain protocols that we are not supposed to do at night or daytime and it really defines these things and now they are going to be captured in these solar panels. Maybe a good analogy is like this tape recorder, it captured and holding my voice. It's going to share the thoughts that I am saying right at this moment, and now it's captured in there, now you are going to be able to play it back and listen to it and it's going to be in so people's eye beneficial because now we'll be able to listen to what we said because we weren't there. But it will be the same type of thing with the solar panels, it's going to record that power and it's going to hold it. Except this one continues to pull the power away and it drains it, like with a battery. Any battery has to be maintained, so that's why we have our stories and our songs even our dead, we have to place people a certain way based on how the sun comes up. Or things where certain animals were created because of the sun and they got the certain characteristics or spots, or animals that are nocturnal that are now going to

be coming out in the daytime because they know there is sun in there. All of these things are going to transmit and carryover.

So just as it will happen in Amargosa it'll happen in Delamar, that all of those rocks and stuff that is supposed to happen when the sun is first coming up, now it is going to be confusing. So that power is still around. Everything that was represented in those drawings people may say, oh it was a long time ago, and some Indian people may say they don't know what the meanings of those are, there are spirits and songs and prayers that are embedded in those things that truly go on. It was my family and my ancestors from long ago since the beginning of time, because people prepared for all of those things and knew how to interact with the environment. It's a good possibility that Delamar, because of the water babies, because of Ocean Woman's Net, because of the mountain sheep, because of the portals, all of those things are things that can tie in very easily to calling the rain. One, you have the vistas, you can see how that rain that you would call down would flow into Pahranaagat, you can see, feel and sense all of the power that was coming through there and needed to be there to talk to all these different things to bring the rain down. You may be on top of that butte or down below where all the drawings are but that's where you needed the vistas and viewscapes so you can truly track the weather. When it's dry, people had to go off; they didn't do it just right where they were living. They needed the isolation and the serenity. So when u were up on top of the butte, you're not bringing all kinds of things up there, which is why you wouldn't find artifacts up there. Those are places where people would go and pray and you had to pray really hard for numerous days, watching that sunset coming and calling that rain. It's a big responsibility. That's why all those different kinds of doctors that we had, there were people there that would do the rain calling, and the ones that would see in the dreams, that can see in the dreams. They can see without talking to them, they are the ones that could talk to the different elements of nature, and even though I say those words, they are not supposed to be recorded down and they're not supposed to be said during certain times, and we really have to be careful with some of that. But those powers are there and that's why we have to use only certain words and we have to describe only certain thing and it's hard.

Because we're now trying to find a way to share things that are so precious to us and so protected, and we're almost forced to share these things because we have to protect these areas, otherwise we'll die, the world will die, and everything around us will die. These mountains will collapse, water and things like the weather will go crazy, animals will be born out of season, and things will happen that people can't explain. Even a lot of the climate stuff happening, these are things that the indigenous people know about, we know about all these different kinds of changes. We have seen how the world has changed, our stories tell us how the water used to be much more abundant and there used to be different animals that aren't here anymore, but there is the representation and knowledge of these things that has been passed down from one generation to the next.

I think somehow, we need to share that this site is not just water babies, but water babies are very powerful, but water babies are one thing, there are the people that communicate with the water babies and use the power of those, there are the results of the power of

those things that are also depicted around there, sometimes when you see the elongated fingers and things, those were the things that had the power to reach out and take in the power of the things around there with those water babies. The interesting thing is the water babies, the need water, but it's also ways that people tend to take about them today, even Indian people. They'll talk about water babies where there is known bodies of water. So for example, you can go up in the northern, central Nevada by Walker Lake, and there's stories of things there. You'll find places where there may be rivers, and people will say they're not around because there has to be water, well, there was water here. You can look at the landscape and you can see where the water is and was. That's why we say, even with these playas, when it rains the water then comes back up and they then become those portals for the water babies. They are able to come up into this world as we know it, and they can still communicate and things, but they will then recede back, they follow that water. Also all of that power follows the water. They're not just songs about the water. If you look at the discussion we had at Amargosa Valley, there's all those different songs, we have our Silver Song and our Salt Song and our Fox Songs and our Mountain Sheep Songs and our Coyote Songs, Rabbit Dance Songs, I could go on and on and on, there are just a multitude and in all those kind of categories there are all these multitude of songs in each one of those. That's why if we start diverting away from this, then we are going to see so much chaos in the world. The disrespect when I was over at Delamar, when you go over there and you can see the shot gun shells around, and there is a car dumped out there which is full of bullet holes, and it just attacks people like that. You're doing it in a place where the mountains, they have feelings and the have ears, they hear and they have eyes to see. So you can imagine when we're not there, and when those prayers were done those rocks hold those prayers. Those prayers and songs are still being said and that's why people, when they come out, they can say, I heard some songs here, I could hear the singing, I can hear different things, I could feel the power of the area. I think with that we have to be respectful of that. It's not the place where you go and try to destroy these things because it's just disrespectful.

If I went out there and I saw those solar panels and thought, look there is nobody around here, those sure make good targets, I wonder how many I could hit from here. And that happens all the time here because we're in rural Nevada. Then just as we used to use mirrors for signaling, it was like calling out with the power of the sun. Even when doctoring, people would use crystals and you could see the power of the sun going through that crystal and the crystal would absorb that. Without the sun, it would be like using, by today's standards, using medical tools and not sanitizing them. Or you're using the wrong tools. You have to have the right tools and they have to be pure. It is the same thing for us culturally, we can't perform our things that we need and use the things that we need, we can't even prepare for that if we have now old abandon cars there, people are shooting around, and this is a place that should truly not be considered for this type of activity because it is truly disrespectful. It's really our religious right, how can we protect these areas here? What would people think if we wanted to put these types of panels in somebody's church? But we always have to prove who we are, prove what we say, prove what we know, as oppose to everybody else that just relies upon literature that may have been published, and just because it is in righting, doesn't mean that it's true.

But we know that our information is true because it has been passed down from generation to generation since the beginning of time. That's why our stories go back and describe all of these things and how we know all of these things. Indian people know and knew that, if they didn't, we would have had any idea about these things and we wouldn't have these words for things that lived a long time ago. We have words that don't translate into modern English because they are very old and spiritual, but they all have meanings and they are things that we know. We know what we have to do, and part of that is to care for the land and ensure everybody's existence, not just the Paiute people. The only way for people to survive in this area is if Paiute people are allowed to continue to take care of and interact with the land and use the land resources and power all around us in a way that it was intended to be used for.

Ethnographic Comments

Throughout traditional Southern Paiute territory, there are thousands of places connected through songs, oral history, human relations, ceremony, and physical and spiritual trails. These connections create complex synergistic relationships between people, place, and object. The following ethnographic comments are provided to help contextualize these relationships and how Southern Paiute people interacted with the cultural features found throughout the Delamar Valley SEZ American Indian study area.

Water Babies

The Delamar Valley SEZ American Indian study area is a unique local landscape that is associated with Puha and ceremonial activities. Southern Paiute representatives believe that the Delamar Valley SEZ American Indian study area is culturally significant because this area possesses a combination of water, rock peckings, medicine plants, and volcanic activity; all of which have power and are connected to the presence of water baby peckings. Water babies are a recurrent theme among Numic groups from California to Wyoming (Loendorf 1993). Whitley (1992) identifies them as shamans' assistants, imparting further emphasis to the shamanistic importance of this area.

Contemporary ethnographic research with Numic-speaking peoples have identified five major sites where water babies are prominent cultural features such as (1) the Grand Canyon; (2) Coso Hot Springs, California; (3) Black Butte in Pahranaagat Valley, Nevada; (4) Black Mountain-Thirsty Canyon, Nevada; and (5) Thermopolis, Wyoming (Loendorf 1993; Stoffle et al. 2009; Stoffle, Toupal, and Zedeño 2002; Stoffle et al. 1994; Whitley 2000). During previous ethnographic studies, Numic-speaking peoples have interpreted these places to be areas in which shamans or Puha'gants visit to transition to the supernatural world to interact with and acquire water babies for ceremonial use.



Figure 22 Pecking Depicting Transformed Shaman with Water Baby Hands in Pahrnagat Valley



Figure 23 Water Baby (right) and Transformed Rain Shaman (left) Peckings at Black Butte

Puha'gants frequently used these beings as spirit helpers to aid them in certain ceremonial practices such as curing or rain making activities. Spirit helpers are generally non-human/animal spirits and are only visible to those who possess them. The type of spirit helper a person possesses influences the type of Puha'gant a person becomes. For Southern Paiute people, spirit helpers are known as *tututuguuvi* and are summoned through song. They generally originated in a place known as *Huawawangki'gari*, which is believed to be the Avwatz Mountains in southern California (Laird 1976).

Depending upon the ceremonial activity, Puha'gants would call upon certain spirit helpers for assistance. For example, the mouse and the packrat were most helpful in doctoring because they were able to steal the disease away. Some spirit helpers were associated with rain making such as mountain sheep. The medicine men that possessed mountain sheep spirit helpers frequently dreamed of the mountain sheep, the associated songs, the ceremonial activity the medicine man needed to perform, and how to perform the particular task. The mountain sheep spirit helper, along with others such as deer, would be summoned from Huawawangkiḡari (Laird 1976).



Figure 24 Delamar Dry Lake Drainage into Pahranaḡat Valley

Some spirit helpers are only associated with extremely powerful medicine men and are considered very dangerous to those who do not know how to handle that much power such as spirit helpers known as water babies. Generally, water babies are considered to be dangerous and a Puha'gant must be brave to engage it and return with new knowledge and understanding of the problem for which he is seeking an answer (Loendorf 1993). Many accounts exist about water babies that focus on the physical danger for approaching a water baby. These accounts have often been shared by elders to young people. There was a consensus among the Indian representatives across tribal lines that water babies required an extremely high level of respect

and caution when approached and should be largely avoided except by powerful spiritual people or Rain Shamans.

Water babies live in flowing water, particularly artesian springs and the water bubbling to the surface is understood as the water babies breathing. According to Miller (1983), hot springs are associated with water baby cooking fires. Water babies are known to frequently travel through the hydrological systems including irrigation ditches.

They are considered female entities and their physical descriptions vary widely. In general, they stand three feet high with long hair and a hard shell-like skin. This tough exterior makes them extremely difficult to kill. Hoebel (MS:13) offers another description; “These are small females standing about twelve inches high.” Some groups like the Washoe believe that water babies are their own society with members of different ages and sexes, with women having a predominant role.

The flow of water (similar to the flow of Puha) across a landscape connects places, people, and resources. The dry lake in Delamar Valley drains into Pahranaagat Valley between Black Butte and the Southern Paiute Red Tail Hawk Origin Lake, as seen in Figure 24. Numic-speaking peoples believe that water babies frequently travel along hydrological systems and thus contribute to how water and places are culturally linked. In the case of the Delamar Valley SEZ American Indian study area and Pahranaagat Valley, the water baby peckings on the volcanic rock demonstrate signs of ceremonial activity. As water drains out of Delamar Dry Lake, the water babies travel to Pahranaagat Valley to contribute to the ceremonial functions and power of the area.

Rock Art Terminology

Rock peckings on the volcanic ridge were instrumental in the American Indian evaluation of the Delamar Valley SEZ American Indian study area. From past studies of rock peckings and paintings, there is a commonly accepted view of these artifacts from an Indian perspective. Rock peckings are sometimes referred to as petroglyphs which is the technical name for the figures found carved into rock faces. The term petroglyph has been grouped with pictographs, or paintings on rocks, into the term rock art. Probably because these things are discussed together and because their technical names are cumbersome, the term rock art has come to be the gloss for these concepts. Today the term rock art is widely used in both the scientific literature and popular writings about pictographs and petroglyphs.

The term rock art is a misnomer from a Native American perspective, however, and one that conveys exactly the opposite message that the Numic-speaking people wish to convey about pictographs and petroglyphs. Conceptually, the term rock art can imply expressive cultural activities which are generally understood under the term art. In Western culture, art can be either sacred or secular, but it tends to be the latter. Art does symbolically convey meanings as well as stories, although the latter is less common. When the numerous conceptual meanings that are attached to the term art in Western culture are reviewed, it is clear that most of them do not fit with the Numic cognition of pictographs and petroglyphs. There seems to be two paths to a culturally sensitive solution for this problem. First, the term rock art is used in this report with

the understanding that it has a restrictive meaning reflecting perceptions held by the Southern Paiute people. In order to facilitate communication, it is necessary to use an English term that refers to both pictographs and petroglyphs. Even the Southern Paiute people associated with this project use the term rock art to describe the study to each other and to others. In this study, the term rock art is operationally defined as pictographs and petroglyphs placed on stone surfaces for sacred purposes, and it does not imply a desire to express cultural aesthetics or casual communication of any kind.

Second, the Southern Paiute and Western Shoshone people associated with this study have searched for a proper Indian language term which will also be used as a gloss for pictographs and petroglyphs. The term they have selected is *Tumpituxwinap*, which literally translates as rock story but more closely approximates storied rocks. According to one Paiute elder and her mother who worked on this question:

Tumpituxwinap is like a story telling time in winter. It is when you are telling a story about someone else's experience. You have these experiences as a child as well as the mythology and legends you hear-- like why do rabbits have white or brown tails. These are the deeper lessons.

The process of finding a single term for rock art was difficult because there are many varieties and no single term completely conveys this diversity. It is both a difficult and ongoing process to find either Indian or English terms that clearly illustrates the meaning of rock peckings and paintings. The task is complex because we are trying to find terms that communicate information between very different cultures and of conveying very different perceptions of a cultural landscape.

Potential SEZ American Indian Study Area Impacts – Tribal Recommendations

During the November 2010, March 2011, and July 2011 field visits, tribal representatives expressed concerns pertaining to the current environmental and cultural conditions of the Delamar Valley SEZ American Indian study area. During interviews, they provided management recommendations for Native American resources and for potential solar energy development.

Solar Recommendations

- Tribal representatives believe that solar energy development in the Delamar Valley SEZ American Indian study area will adversely impact the identified special features (see Table 1). They maintain that it is necessary to preserve this sacred place because of the adverse consequences that damaging it would have on the balance of the world.
- Tribal representatives consider the cultural resources in the Delamar Valley SEZ American Indian study area to be important to understanding their past, their present, and their future. They stipulate that these resources will always be culturally important to Southern Paiute people.

- Tribal representatives believe that the culturally significant places mentioned in the above text should be considered for tribal declarations as Sacred Sites (Executive Order 13007) and nominations as Traditional Cultural Properties (Bulletin 38) to the National Register of Historic Places.

Bureau of Land Management Recommendations

The consulting tribes believe that Delamar Dry Lake and Delamar Valley should be managed as an integrated spiritual cultural landscape with the Pahranaagat Valley. To accomplish this goal, Southern Paiute tribal representatives should be brought together with Bureau of Land Management (BLM) and Fish and Wildlife managers to work out an integrated cultural landscape management plan.

- The BLM should provide better protection of the Point of Rocks Ridge (including the pecking panels and rock shelter).
- The BLM should remove the abandoned car that is being used as a shooting target at Point of Rocks.
- The BLM should understand the cultural conflict of having an animal corral located around a cultural site that contains a BLM sign that identifies it as a cultural place.
- Tribal representatives believe that the culturally significant places mentioned in the above text should be considered for tribal declarations as Sacred Sites (Executive Order 13007) and nominations as Traditional Cultural Properties (Bulletin 38) to the National Register of Historic Places.
- The consulting tribes desire to be formally contacted on a government to government basis whenever projects or proposed land management actions occur on and/or near the following topographic areas:
 - Turtle Butte,
 - Point of Rocks Ridge (including Associated Pecking Panels and Rock Shelter),
 - Delamar Playa,
 - Delmar Mountains,
 - Southern Pahroc Range,
 - Pahranaagat Valley