

**Nevada Test and Training Range, Nellis Air Force Base
Legislative Environmental Impact Statement
Native American Ethnographic Studies
Study Area for Alternative 3C
December 1 – December 3, 2017**

Prepared By:

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This document contains the observations and evaluations of
the members of the CGTO Writers Committee.
When released it will have been fully reviewed and approved.

PREFACE

The purpose of this Preface is to explain the structure of the following report of cultural identifications and evaluations related to the proposed expansion of Nevada Test and Training Range (NTTR). This proposed action is being assessed in a Legislative Environmental Impact Statement (LEIS). This report is focused on the study area for Alternative 3C, which exists to the east of the NTTR in the United States Desert National Wildlife Refuge (DNWR).

The authors of the report include researchers from the Bureau of Applied Research in Anthropology, School of Anthropology, University of Arizona and members of a Writers Committee appointed by representatives of 17 Native American tribes who are in formal government-to-government consultation with Nellis Air Force Base (NAFB) for the NTTR LEIS. The consulting tribes identify themselves as the Consolidated Group of Tribes and Organizations or CGTO.

The following report is organized by places in the proposed expansion study area, called Alternative 3C, that were visited by the Writers Committee. The analysis of each place contains (1) a description of the place and why it was chosen for assessment, (2) the Writers Committee's cultural identifications and assessments, and (3) *tiering* information. The latter is required by federally mandated guidelines, which largely derive from the National Environmental Policy Act. The place descriptions and Writers Committee assessments are rather straight forward, and thus easy to understand, but the tiering requires a bit of explanation. In general, tiering involves a commitment to use past studies involving similar topics and/or places as those that are being considered in this study. As such, tiering is used to contextualize what is being said by the Writers Committee. In other words, tiering information places new cultural identifications and evaluations alongside ones that were provided during one or more similar studies.

The following tiering statement corresponds with ones about roasting pits that are found throughout the Sheep Mountains. Roasting pits are one of the most common archaeological features of the DNWR area and thus worthy of additional ethnographic attention (Lodge 2016). In this Preface we use a quote from a 1993 (Stoffle, Halmo, Evans, Austin 1994) ethnographic study of the Colorado River as it passes through the Grand Canyon, Arizona. Roasting pits were identified and discussed during that study. The following is a quote made by a Southern Paiute elder at one of these roasting pits:

...they gathered some plants like yaant and other plants they used to eat or roast... The Paiutes used to go down the river a long time ago and they gathered yaant, and after they gathered it they would roast it. And they would also make a small niche where they'd roast their yaant. And then it bakes all night. So that yaant has syrup too. The syrup seeps out of the ground. The syrup is gathered... The next morning they'd get that syrup and remix it with yaant, and dry it on the rocks there the next morning.

First they would structure a small roasting pit and then they would find wood for it, and the only person that was allowed to build a roasting pit or find wood for it

would be the person who was born in June, in mid-summer... This was the only person allowed to build that kind of a fire for that kind of roasting. So he would start up the fire from the east. So that's the only person who could do that kind of roasting; [he] could start up a fire from the east only...So this man had no clothes on—naked—roasting yaant. And he would be the only person roasting; no other person.

He says he would roast it on a hot surface ground. So that's how he would collect the syrup. This person would open that pit, this person would have an arrowhead to cut up small pieces to distribute to people. The people would be there...I guess his name was "person born in summer."

This person would be trained first. He'd learn from a person who had also done that kind of work...And also a person who knows how to make bow and arrow. He'd learn from his father. That way they would choose the person who does this roasting, the people already knew that the person was born in the summer. That's how they would choose the person. A person born in summer would teach a young man.

In those days, after the feast, there would be a ceremony, a dance... There would be a peace dance. There are old words that we use, older Paiute words that we use... Yaant was also used as a hair brush... This plant was useful. It would be up, and also it would be in the canyons...Anna says the people who gathered the yaant used a rock pounder. They would go to the center [the agave heart]. It would be severed when it's ripe... that's what they're after. Once they got the leaf off...

[The agave roasting site] would be considered as sacred land and also... as a power against the enemies. Back then we had a lot of enemies... They have eaten, they have danced there, they have had [a] ceremony there at those places...Anna was talking about the bloom of that flower. It's blue, purple... So, she's just saying that the old people called it blood...The flower. The tip of it... So we still hear "blood," "vein"... The blooming of the flower is like the river and also like the blood...

The explanatory value of the quote becomes apparent when the cultural identifications and evaluations of the Writers Committee are presented for one of the roasting pit areas located near White Rock spring. Other tiering information is subsequently provided for this topic following the Writers Committee's comments.

CHAPTER ONE INTRODUCTION

This document serves as a summary of the CGTO Writers Committee field activities and the itinerary for the NTTR LEIS December 1-3, 2017 field visit to the study area for Alt 3C in the Desert National Wildlife Refuge. This is also a summary of findings. Those findings will include Writers Committee cultural resource identifications and interpretation. Those findings will also include assessments of potential impacts to these cultural resources and traditional places in LEIS Study Area for Alt 3C. The study findings are being prepared by the UofA team and will be reviewed for accuracy by the members of the Writers Committee before being released to the LEIS writing team.

This trip report does include tiering information, which is provided to situate and elaborate on the cultural meaning of resources and places identified by the Writers Committee. All tiering information derives from past cultural studies conducted near Study Area for Alt 3C and is thus considered to be directly relevant. The conclusions from these studies were all approved at the time by the participating Native American representatives and their consulting tribes.

The Writers Committee (Figure 1.1) representatives received a hard-back field notebook that contained maps and descriptions of each site to be visited. In the notebook were Data Collection forms especially designed to be filled out in writing by each member of the Writers Committee at study sites. A form designed to organize potential observations was provided for each site and resource topic to be studied. In addition, each member of the Writers Committee was provided with a voice recorder that could be used to document their thoughts while walking to and from the study area sites. Individual observations, both written and recorded, were supplemented by an end of day circle discussion by the whole Writers Committee. These circle discussions were open ended but focused on their collective observations.



Figure 1.1 The Field Team UofA and CGTO Writers Committee

The weather was ideal and no significant impediments were encountered. The field session occurred as was planned during the Scoping Trip conducted in September of 2017.

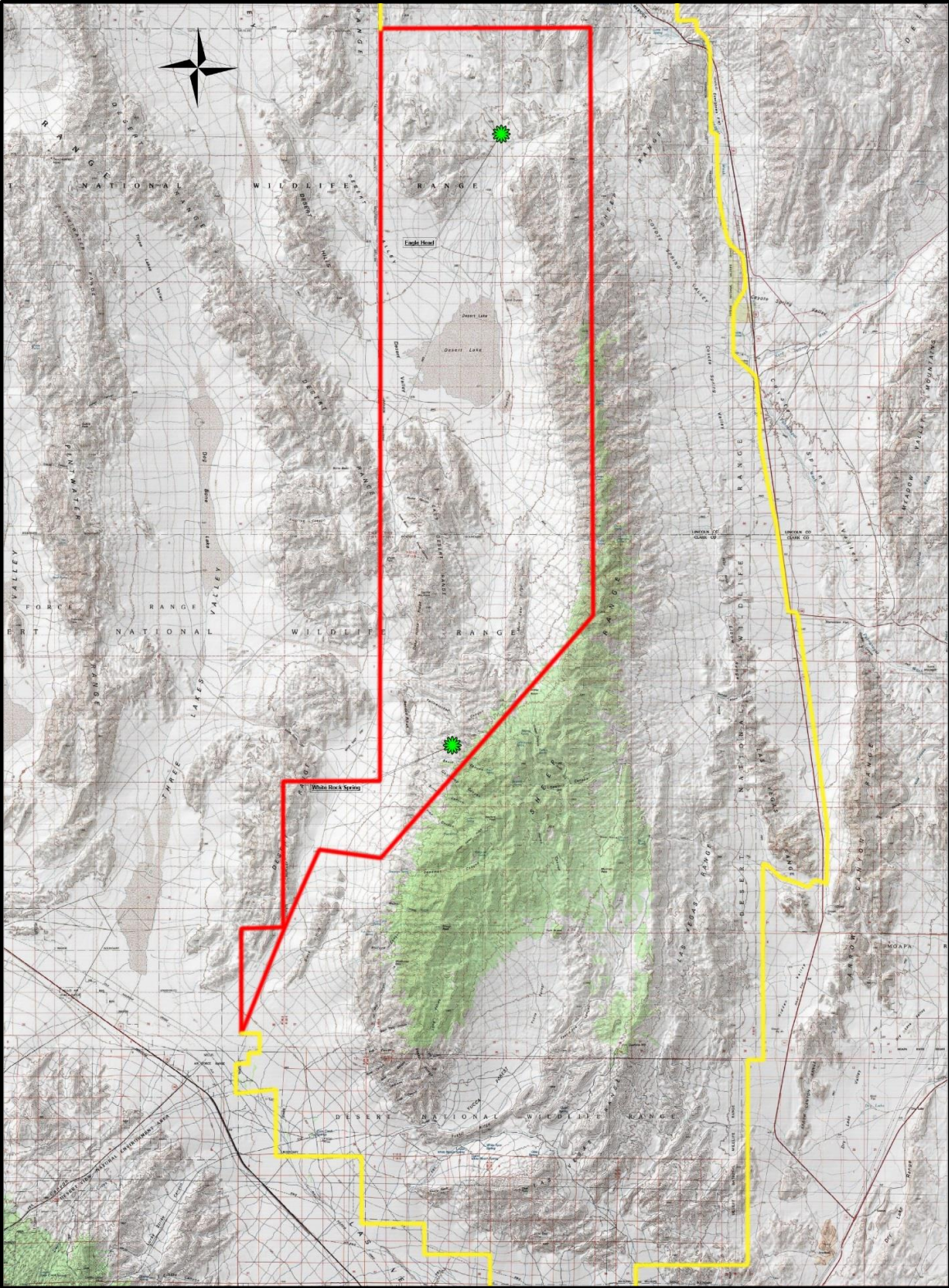


Figure 1.2 Map of Study Area for Alternative 3C in Red and Two Primary Study Areas Indicated as Green Dots

The LEIS Field Study in December 2017 was preceded by a Scoping Trip involving the CGTO Writers Committee. This trip was conducted in late September 2017. After visiting a number of locations during scoping it was decided that the field studies in Study Area for Alternative 3C would include (1) Eagle Head, a known archaeology site; (2) the Desert Lake Playa, a prominent topographic feature; (3) White Rock Spring, another known archaeology site which combines archaeology with a spring and shift to upland ecology; and (4) the Joshua Tree Forest, which dominates the ecology of the lower valley.

In addition to talking about places, it was decided to talk about specific animals and plants found in various locations. Examples of animals include (1) hawks, (2) eagles, (3) mountain sheep, and (4) snakes. Examples of plants to be considered are (1) yucca, (2) Indian tobacco, (4) Indian ricegrass, and (4) pine/cedar. Other plants and animals were open to discussion depending on the cultural interests of the Writers Committee. Cultural landscapes were suggested as way of understanding the whole area and perhaps even the region.

The following is a list of the day-by-day activities, followed by a series of photos, maps, and archaeology observation for each study location. All times are approximations.

Day 1: December 1, 2017

- Breakfast on your own
- 7:30 AM: Check out of hotel room, leave luggage at front desk
- 8:00 AM: Leave for Northern Section of Desert National Wildlife Refuge
- 11:00 AM: Arrive at Eagle Head, have lunch, visit site, and fill out forms
- 2:00 PM: Leave Eagle Head and head for Playa (Optional)
- 3:30 PM: Leave for Hotel
- 6:00 PM: Arrive back at hotel, check into hotel room

Day 2: December 2, 2017

- Breakfast on your own
- 8:00 AM: Leave for Southern Section of Desert National Wildlife Refuge
- 10:30 AM: Arrive at White Rock Canyon Trailhead, visit White Rock Spring, have lunch, fill out forms
- 3:00 PM: Leave for Hotel
- 5:30 PM: Arrive back at Hotel

Day 3: December 3, 2017

- Breakfast on your own
- CGTO Writers depart for home

CHAPTER TWO DAY ONE

Orientation at Pahrnagat occurred quickly because the Writers Committee had been there earlier during the scoping trip (Figure 2.1). The field activities were reviewed and the new Data Collection form, which was especially prepared for the Writers Committee, was discussed. Pahrnagat Valley, which is formed by the White River, was discussed as a major center of Native American settlement. It was the major regional area for irrigated farming. The people of Pahrnagat Valley were connected with those in the Moapa Valley because the White River continues down stream to become the Muddy River. The lush Pahrnagat Valley is well illustrated in a display located at the Visitor Center. This and other displays were developed with input from Native Americans.



Figure 2.1 Orientation at Pahrnagat

The White River is central to an extensive hydrological system that feeds into the Virgin River and subsequently into the Colorado River to the southeast (Figure 2.2). The area is thus topographically a part of the Colorado Plateau and not the Great Basin. The Pahrnagat hydrological system has permanent and abundant water because it is fed by snow and rain that falls on much higher surrounding mountains, especially near its headwaters to the north. While the mountains are covered with dense forests, the valley itself is arid. Together these produce a fertile riverine oasis, which has supported Native American agriculture for thousands of years (Figure 2.3).

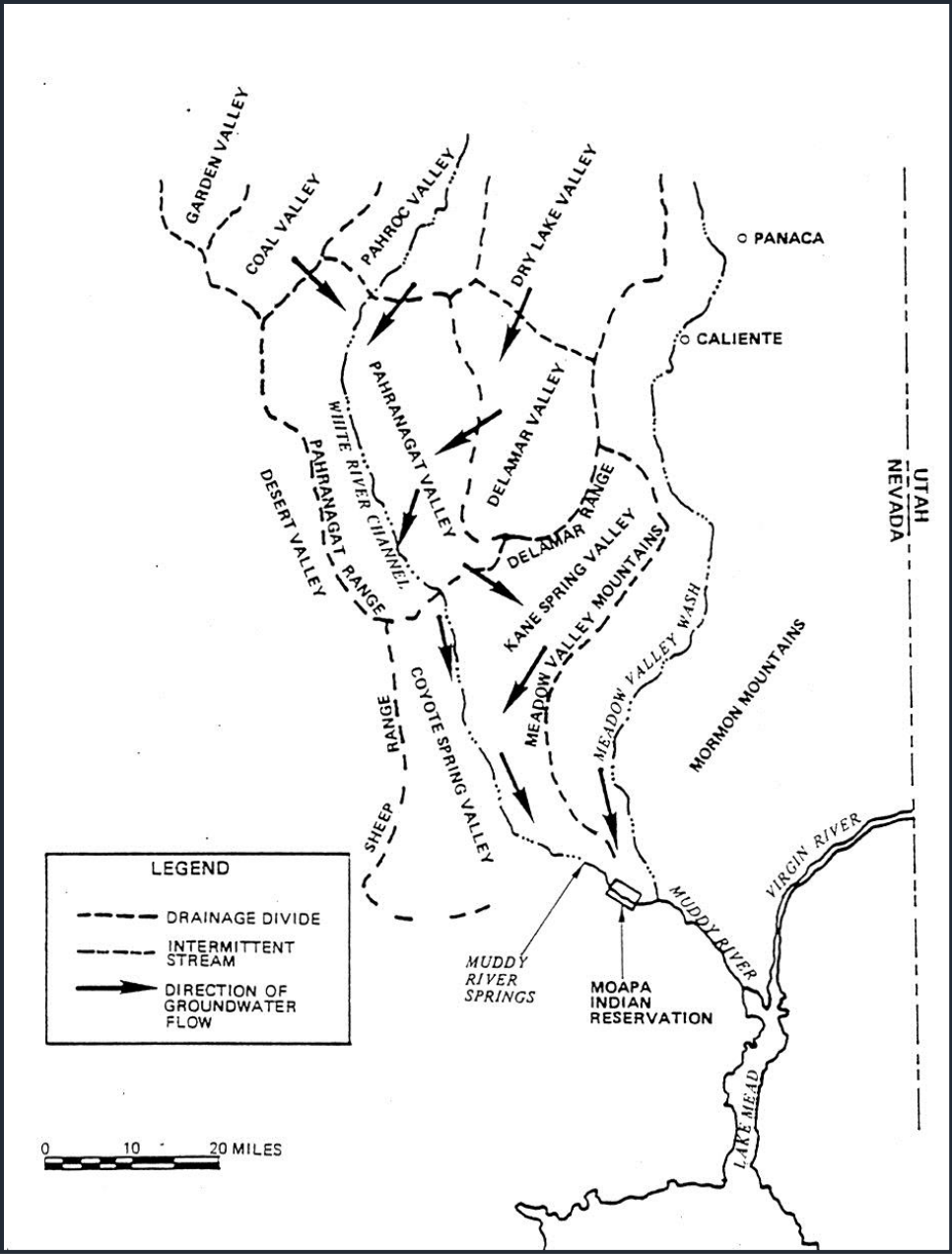


Figure 2.2 Hydrological System of Pahrnagat and Moapa Valleys.



Figure 2.3 Hydrological Display of Pahrangat Oasis at Visitor Center

The cultural significance of places like Black Butte in Pahrangat Valley are well understood from past studies going back to the 1870s. When Powell visited the Native American farmers in the valley he recorded a poem that they had composed regarding their feelings about the beauty of the area. Some of these cultural implications were discussed by Dr. Stoffle at his invited presentation at the November, 2017, Nellis AFB Native American Program. The following text in italics is from the American Indian Transportation Study of 1999.

In 1870, Major J. W. Powell recorded a Paiute song about this valley called The Beautiful Valley [MS 831-c] (Fowler and Fowler 1971: 125).

<i>Pa-ran'-i-gi yu-av'-i</i>	<i>The Paranagat Valley</i>
<i>Yu-av'-in-in</i>	<i>The Valley</i>
<i>Pa-ran'-i'gi yu-avai-I</i>	<i>The Paranagat Valley</i>
<i>Yu-av'-in-in</i>	<i>The Valley</i>
<i>U-ai'-in-in yu-av'-I</i>	<i>Is a Beautiful Valley</i>
<i>Yu-av'-in-in</i>	<i>The Valley</i>

[NOTE: This song and poem reflects the traditional views of the Indian people about this valley. In 1870 Powell recorded but a small portion of this tradition song, which was then sung to the valley. This is a point to remember when cultural landscapes are discussed in the report of findings.]

A similar environmental perspective was recorded six years earlier in 1864 when William Nye lived a winter in the valley. In his essay entitled “A Winter Among the Paiutes,” Nye (1886: 194) noted that:

Pah-ranagat is purely an Indian name, and one which in the Piutes dialect signifies “shining water” — the Valley of the Shining Water — a name which, at least, reflects no little poetic faculty of the Indian dwellers in this valley of the mountains. After all, it is a pleasant thought, that in the past that little strip of fertility with its grass-bordered streams has been an Indian paradise.

Nye’s mining camp was located on a mountainside within view of Lower Pahranaagat Lake. Below the camp was an Indian village whose inhabitants grew corn and melons. Fowler and Sharrock (1973: 134) study of this valley, based on field archaeology and documents, indicated that from the protohistoric period until at least 1865 the “Southern Paiutes were farming with the use of irrigation ditches in the valley.”

Although Nye noted the belief of his fellow Americans that native Indians and the white man are natural born enemies and that we are here only to fight and kill each other, it was Nye’s experience that:

...Ours was an honest struggle to live in peace with our Indian neighbors; and we found them, in many respects, not very unlike what any community of two hundred white men would have been under the same circumstances...Their chief (Pah-Wichit) saw fit, at the outset, to remind us that the region was his domain. He said: “Me one great capitan,” and with impressive gesture, he pointed down the valley...

Despite the early efforts of Nye to forge a peaceful co-existence with the Indian villages of the valley, the State of Nevada was to establish the first county seat just upstream at Hiko. Before that could happen, however, there had to be a growth in local population. New settlers came to mine and farm. As a matter of policy and of image, the Indians had to be controlled. In the late 1860s the members of two Indian villages, one located near the current town of Alamo and the other near Hiko, were surrounded and killed. By 1973 Powell and Ingalls recorded in their population survey of Indians 171 Pahranaagat residents in the valley headed by a chief called An-ti-av (Fowler and Fowler 1971: 104). According to this report, the Pahranaagat were formerly three separate tribes, but their lands having been taken from them by white men, they have united in one tribe under An-ti-av (Fowler and Fowler 1971: 107). All local Paiute Indians, including the Pahranaagat, were relocated to the new Moapa Indian Reservation in 1875.

The archeology of the Pahranaagat Valley is not well known, however some important work has been accomplished. Henningson et al. (1980:388) estimated that there are 400 Native American sites in the Pahranaagat Valley, of which 35 are presently known. Fowler and Sharrock

(1973: 103) study of 151 archaeology sites in the region indicated the presence of an historic Paiute site last lived in by Indian Pete and his family. The site is 200 meters north of the Hiko Post Office. Indian Pete is said by local non-Indian families to have died there and is still buried nearby.

2.1 Eagle Head

Today the road south from the Pahranaagat Valley is rough and difficult to traverse in places, as is universally true of all roads within the Wildlife Refuge. This observation becomes a variable regarding the cultural interpretation of the whole area as generally isolated from intrusion. When leaving the lush oasis of Pahranaagat Valley, the road traverses extremely arid lowland terrain surrounded by high wooded mountains that trend in a north to south direction (Figure 2.4).



Figure 2.4 Alamo Road South of Pahranaagat

The Eagle Head study area was chosen by the CGTO Writers Committee because it contains a number of pecking panels on stone walls of a narrow canyon or constriction. A large wash that flows north to south from small volcanoes into the playa lake bisects the Eagle Head constriction. The playa lake is also called Desert Lake (Figure 2.5), and it is the largest body of water in the Alternative 3C study area.

2.1.1 Native American Comments

Comments were provided during the site visit to the Eagle Head area. They are divided by significant cultural features at this location including (1) trails, (2) a medicine boulder, grinding area, tonal rock, (3) rock pecking on wall of constriction, and (4) sound and viewsapes. The traditional trail passes through the constriction between two large masses of stone. The Medicine Rock or Doctor Boulder is located along the west face of the larger mass of stone. The rock peckings are located along both sides of the construction along what would have been the near edges of the traditional trail.

2.1.1.1 Traditional Trail

Visiting representatives identified the Eagle Head Constriction as part of a trail that connected Desert Lake to other sacred features to the north and south (Figure 2.6). Many features surrounding the constriction designate its purpose, including peckings, grinding areas, and a doctoring rock shelter, which are often associated with pilgrimages and ceremonial areas. The trail is also located between highly significant places.



Figure 2.6 Eagle Head Constriction Looking NE



Figure 2.7 Discussing Traditional Trail Through Eagle Head

Nuvagantu or Mount Charleston to the south, the primary origin mountain for Southern Paiute peoples, and Coyote's Jar or Pahrangat Valley to the north, a second origin location for Pahrangat and Moapa Paiutes, indicate a significance of the area tied to the oral histories of Native American people (Stoffle, Toupal, and Zedeño 2002). Some visiting representatives identified the playa as the destination place, while others described the trail as a connection to their origin spot, located in the Spring Mountains visible to the south:

- *Coming from Pahrangat to Corn Creek and Mount Charleston or Snow Mountain is a trail used to go to Dry Lake which has a lot of roasting pits at the base of the mountain.*
- *I think this was just one of many areas that Paiutes traveled, just to get somewhere. Also, it was used for trade routes in all directions.*
- *[The trail is a] pathway to the Spring Mountains.*
- *Petroglyphs and rock shelters stand out. From the hilltop it looks as though people would have used many routes to travel east, west, north, and south out of the valley.*
- *It could have been a passage from farming communities to other locations. In my mind these trips could be for any reason to include communication, vacation to visit family, trade, ceremony visits, hunts, meeting other nations, alliance against enemies, scientific information sharing, education, learning skills.*

Although the constriction marks “a trail used by the people coming and going” it also represents “a place to stop and make offerings... a sacred place.” Offerings, prayer, and ceremony are central to the Eagle Head area. One representative noted, “this narrow spot is a very powerful spot. Gathering Puha, prayer.” Power, or *Puha* in Paiute, sits in places. The presence of power in this location is tied to the use of Eagle Head during pilgrimages. Power can be drawn from a location to perform activities, such as doctoring, which in turn requires prayers and offerings as exchange. The following comments demonstrate visiting representative’s perceptions of Eagle Head as a place for various activities involving power:

- [This is a] *trail with power to keep balance in the world. The rock openings are the voice of the rocks that come back to life when speaking Indian. The rocks hold songs, stories and medicine to protect the land. The location is described in badger and mountain sheep songs used for protection and weather. The badger takes the songs and messages from below to the surface to help Indian doctors.*
- *This location is a powerful place on the journey to “Pahranas” to be doctored and to keep the world in balance.*
- *When people travel they would give offering to the land for safe trip.*
- *As stated earlier this place has big spiritual power.*

In addition to describing the area and its use, visiting representatives also described how Eagle Head is connected to other places. In accordance to their belief, all things are connected, to include people (both humans and animals), places, and things. One representative noted the connection as a stream of Puha that travels to other significant locations. They noted that Eagle Head “is connected from the Puha that travels from Black Mountain in Pahranaagat to Moapa Arrow Canyon, Potato Woman, Sheep Mountains and Spring Mountains. The water carries the message through water babies that come to life at the playas and disappear to go underground.” Water Babies are powerful spiritual beings that live within these areas, typically associated with peckings found at Eagle Head. Therefore, natural elements (water) and spiritual beings (Water Babies) are both important components for carrying Puha back and forth between places. At Eagle Head, Desert Lake is a portal through which this power flows and how this land connects to other locations, people, and places. Water is a key element in this flow and exchange. Throughout the Southwest, water marks the portal that connects between places, as “Water babies travel from playas to other water sources in Moapa, Las Vegas, Pahrump, Ash Meadows, Indian Springs, Death Valley and 40 Mile Canyon.” Another representative noted that this area is connected to the living ancestors of this sacred land: “Southern Paiutes to south and east. Shoshones to west and north.” The following quotes demonstrate how this place is connected to other spiritually significant places and the ways through which this connection manifests:

- *This is connected to places such as the Black Butte of the United States Forest Service. It is connected to the place with many water babies and other petroglyph places in Pahranaagat. Near Pintwater, Wellington Canyon, Spring Mtn.*

- *Las Vegas out to Beatty, Duckwater, really anywhere west, north, and east of this area.*
- *Everything is connected just as all waters are connected. We are all brothers and sisters.*

2.1.1.2 Doctor Rock (Boulder)

The Native American representatives identified a place containing a large boulder that is used for healing, sometimes called Doctoring (Figure 2.8). It is associated with the large wall of the eastern portion of the constriction. Next to the Doctor Rock (boulder) is a grinding area and a tonal rock that were used in healing (Figure 2.9). One side of the boulder is enclosed with stones. The other side opens into an area located below the boulder. The entrance to the doctoring area is smooth, apparently from long-term use by the medicine persons and patients (Figure 2.10). There is a view of the playa lake from this healing area.



Figure 2.8 Doctor Boulder Walled Up (Enclosed)



Figure 2.9 Grinding Area and Tonal Rock at Doctor Rock



Figure 2.10 Smooth Entrance Edge of Doctor Rock

The following comments section is composed of quotes from a number of representatives who visited and interpreted the healing location called the Doctor Rock:

First of all, it is not natural, this rock here. And it is rounded actually. On one side there is another slick here that has had another rock pecking to peck a little dimple into it, to catch whatever you are grinding. People would look at this rock and you would see there was not much here. But then you are close here for preparing things, and you have the playa there, and you have the sun that is right there as well. This is actually a good secluded or isolated place that you would come to prepare stuff here. Right around the corner you have some of the petroglyphs and the drawing that are there, one has a little man, part of it looks like it is chopped, he may have lost his head, but a lot of times when we have that, just like over at Pintwater, is represents what the person was dreaming while they were doing their thing. The one over at Pintwater has the mountain sheep that is on the front of the

pecked person. Thus it is inside of the person. That is where he is getting his medicine [from his spirit helper]. And eventually they become whole. This is something that was used for the medicines. And I think when you look at the petroglyphs that are here, but then you have flakes over there, so people were leaving those things behind.

When you listen to the land right now it is like an orchestra that is happening right now. There are all kinds of activity going on. And it is not just the animals and the birds that are around, they are very, very important, but even those tiny insects are animals. Our water is viewed just like an animal. The land and these rocks are just like animals. They have personalities, they can be harmed, they have voices, and they can react. While they are standing here right now they are waving and wanting to hear our voices and our interactions.

We are brushing the lip at the edge of the rock shelter, and it is just smooth. It has been worn smooth apparently by hands for a long time, because the rock itself is very hard and not smooth. If a person is in here, even for doctoring, you can have the patient in here, and the doctor was out here. This is more smooth than that grinding slick nearby. It is pretty similar, but I think that is actually more. People have been rubbing the rock on the way in, or maybe concentrating energy or talking to it? So this would be the kind of thing that one is used for not only doctoring but it was the conduit that you put in here. And this, this goes all the way over here [across the valley to the playa or to other dimensions].

[Regarding the white stone chips on the ground all around the doctoring rock]... see this is the kind of stuff archaeologists do not pick up. No one picked that up but you, I have had six, seven people and no one picked that up. Offerings? I saw a bunch of things on the other side. I did not know if they were offering flakes or if they were shards. But either way they are not from here. That would make sense that it would be an offering coming in, either on your way out or, you know, either way. Both ways.

This place is the kind of thing that this is obviously continuous used. So this is not just somebody came over, traveling through, made a fire here and said now I am going to go on and find out where I sleep tomorrow. To me it is, that is actually really significant. And you had a tunnel rock over there too. And the other interesting thing about this is, this still has, even if you have water or weather or whatever else, this gets weathered as well.

Regarding the nearby so called grinding slick and tonal rock... Calling it a grinding slick, no. A cultural slick, yes, or a doctoring slick, yes. This one here has been rounded right here, this has been shaped, then it was weathered from being out here for so long. Some [tonal rocks] have different types of rocks underneath, some of them will have multiple holes in them, some actually have holes all the way through but it changes the tone on all of those. Some of the songs that we have talk

about the weather. But there was a storm miles and miles away but you could see the lightning, and the lightning would start responding to what we were doing. And they started slowly coming and then they would go away. You do not control [weather] you interact with it. And then you are one with it. So when you start communicating and it communicates back then you know, not only have you made the connection, but good things start to occur. That is when things get stronger and you see the power getting stronger, the songs getting stronger. That is how it works

2.1.1.3 Rock Peckings

An important feature of the Eagle Head site was the presence of rock peckings. Petroglyphs offer another level of connection for America Indian peoples. Representatives spoke about how “petroglyphs and rock shelters stand out.” Peckings are also a sign of *puha*, and can mark “a really powerful spot” and should be respected accordingly. The following quotes are excerpts from conversations regarding the power represented by peckings.

- *[W]e pay homage to the creator by remembering and facing the symbols, connections, leaving that on the rock, knowledge (Figure 2.11).*
- *This place here, the first time I visited. It was a really powerful spot. I have wandered around all through here, a good part of the state and maybe I have a come across 2-3 places like this, very powerful. If you noticed I was not down at the rock drawings today for that simple reason, it is really strong. It is out of respect. This is really a strong place, and for them to do what they want is wrong.*
- *So just coming through the wash we noticed a lot of petroglyphs down here, but we see a lot of graffiti on the walls, people initials, chipping parts of them away.*



Figure 2.11 Pecking on Rock Face at Eagle Head

Representatives also made comments regarding how peckings can symbolize features of the land around it. The following remarks demonstrate how petroglyphs could be used to represent place.

- *I do not know, those big rocks have directions on them it looks like, I have seen river maps, they were not going zigzagging like this (Figure 2.12).*
- *When I see like the zigzags and you see it along the water, to me it always represents the water next to it, showing it. It would be neat to know what stories were told regarding that area, like tribal legends.*



Figure 2.12 Peckings on Rock Face at Eagle Head

Peckings are also a source of connection to ancestors, tribes, and locations. Petroglyphs were often talked about in tandem with use and other locations. Similar peckings are at various places and can show a cohesion of use and affiliation. Below is a comment about peckings and how they represent interconnectedness between ethnic groups, land, and purpose.

This is actually a good secluded or isolated place that you would come to prepare stuff here. Right around the corner you have some of the petroglyphs and the drawing that are there, one has a little man that is kind of fallen, part of it looks like it is chopped, we may have lost his head, but a lot of times when we have that, just like over at Pint Water, as part of what the person was dreaming while they were doing their thing. The one over at Pint Water has the mountain sheep that is in front, inside of the person. That is where he is getting his medicine. And eventually they become whole. This is something that was used for the medicines. And I think when you look at the petroglyphs that are here, but then you have flakes over there, so people were leaving those things behind.



Figure 2.13 Knotted Strings



Figure 2.14 Lineal Peckings on Rock Face at Eagle Rock

These rock peckings are located in a canyon along with hundreds more. Taken together they represent a significant portion of the archaeology found at Eagle Head. All of the Native American representatives talked about the cultural significance of the pecking and this special place where they were placed. They also talked about who made the pecking.

You have rock writing over there that was made maybe in the day time maybe in the night, who knows? While those old people were surely there, we also have our beliefs that sometimes it is not us but it is other humans that are doing it. You have Indian Doctors that can do it, but you have those little people who can also be chipping. When they do make rock pecking you will hear the noises of them making those designs. Those medicine people that make those designs too, When the animals were big, they were also like human beings and they had the ability to leave some of these things peckings too. And they [the animals] are Paiute people, they understand our language. And I am sure the Shoshone people, Mojave people, Owens Valley Paiute, when they talk Indian they connect to the animals and the land. And that is what the land needs to hear. The Indian language. And the land knows who is from here, and the land knows if you are visiting through or coming back home.

2.1.1.4 Sound and Viewscapes

Two of the things we need to consider are the acoustics that you hear and the vistas or the views that you see. I think are very, very important. The viewscapes and the songscapes. We talk about spirituality and we talk about ceremonial activities but it is almost like we don't talk enough about what we hear and see at a location and how these influenced those old people when they picked places for special activities and events. The acoustics are very apparent here. When you guys were over there I could hear you guys like you were right next to me.



Figure 2.15 View of playa and valley towards south

Lack of sound is also an important feature to visiting representatives. One representative discussed the relation to silence and power, noting:

The silence here is a resource, that is why this place is special. It puts you in place when you come to stillness. It puts you in a place that nothing else is of distraction, you see all around you, the natural setting, the world around you but you are also in the setting, connecting, strengthening that connection with the creator. You can only imagine what the ones before us trekking this trail, a pilgrimage trail, as has been described, but the thoughts and feelings were left imbedded in the ground, in the rock, in the plants, in the mountains, in the sky, in the places below ground, what they felt, the land speaks, and we just listen.

Based on their experience with the sounds of the area, one representative recommend “a name for this area that has something to do with echo or a sounding pass.” To the visiting representatives, sound is a central feature to this location. Archaeological features such as the tonal rock further emphasize the importance of soundscapes at Eagle Head.

2.1.2 Eagle Head Tiering

Figure 2.13 is an image of knotted strings which, according to Powell (1868-1880), are called by the Las Vegas Paiutes *ning-a'-to-nap* meaning counting story or strings with knots (Fowler and Fowler 1971: 153). These knotted strings are better known by their common Quechua language name Quipu or Khipus used in among traditional peoples the Andean Mountains of South America. This symbol is commonly associated with spiritual journey trails, sometimes called pilgrimage trails (Stoffle et al. 2009; Van Vlack 2012).

Peckings such as the knotted strings found at Eagle Head often are directly associated with pilgrimage trails. As such they coordinate ceremonies and activities along the trail, and are an essential part to marking these locations along the journey (Van Vlack 2012). Visiting representatives noted that these peckings would have served as a marker to identify destination features within Eagle Head, such as the Doctor Rock. The trail further serves to connect other important resources to these destination locations. According to the research done by Stoffle, Toupal, and Zedeño "Doctor Rocks do not need water or plants nearby, but these resources must be on the medicine trail to and from the place of curing," (2002: 29). Therefore, the primary and tributary trails connect this location to other necessary resources such as plants and water.

2.2 Desert Lake Playa

Desert Lake was observed and discussed from the various places at Eagle Head (Figure 2.16). The Writers Committee did not drive directly to the dry lake but felt they could assess its cultural importance from their vantage point.

Playas, especially those that periodically become dry playas are poorly understood by federal and state agencies because there has been a persistent agency theory that these topographic features are marginal to Native American life. In general, Indian people recognize that these are old living areas going back to a time (end of the Pleistocene) when the lakes were full and surrounded by lush vegetation. Slowly the lakes receded but Indian people continued to live along their shores. Given the thousands of years that Indian people had lived along the edges of these lakes, it is natural for them to remember those past times and return to the playas today to reconnect with their ancestors and the places that made them strong.

Desert Lake has been studied by Far Western archaeology group (Wriston, Gilreath, and Duke 2007). A proposal to improve the Alamo Road which crosses a portion of the Desert Dry Lake playa created a project area of 322 acres of archaeology inventory and three backhoe trench excavations. In just this small portion of the total Lake/Playa area, seven archaeological sites were recorded, two of which were recommended eligible for the National Register of Historic Places. The study suggests that the area was occupied in the Middle Archaic, Late Archaic, and Late Ceramic periods. Carbon dating suggests occupation dates of from 6970 BP and 2000 BP.



Figure 2.16 Desert Lake Playa from Google Earth

2.2.1 Native American Comments

The Native American representatives looked from the high points at Eagle Head and talked about the relationship between this constriction on a trail and the relationship between it and the massive playa seen down slope. Key in this response was the situation of both between the large mountain ranges on both sides of the valley. The following quote is from one of these interview sessions.

[The mountains] are in control. It is basically like the sleeping giants that are around here. And they need to be woken up just like what we do with water, you have to stir the water before you start talking to it and things, the same thing with this, you have to interact with this. And they have to hear your voices, they have to hear the songs, and they will come back. We saw other places around where you have all of those little holes in the mountains and it froze, they are just there. People can hear the songs or the sounds, the wind that can come out, kind of the moan that you hear. It is the same kind of stuff that these mountains will react. But the mountains are happy. It is a happy environment. There is peace and serenity here, because that is what they expect, that is what they see, that is what they know, and that is how they can react.

The Desert Lake Playa is associated with a pilgrimage trail that extends from Pahranaagat National Refuge to Corn Creek and follows the traditional territorial boundary of the Southern Paiute and Western Shoshone. Visiting representatives identified the Eagle Head constriction as part of this trail that connected Desert Lake to other sacred features to the north and south; as one representative said:

You can only imagine what the ones before us trekking this trail, a pilgrimage trail, as has been described, but the thoughts and feelings were left imbedded in the ground, in the rock, in the plants, in the mountains, in the sky, in the places below ground, what they felt, the land speaks, and we just listen.

Playas are a feature within themselves for Native American people of the southwest. They provide resources such as water, salt, vegetation, and animals with seasonal rains. The following quotes about Desert Lake and playas were provided during the field visit.

- *That playa, that is one of the things that is very, very important. Because this is all, as arid as some people may think it looks, is a very lush environment. And you have water that comes through here that actually went down to that playa and come back to life. And when you have that water, then you have the water babies and you have the other beings that live on and rely upon that water. So it is not just them, but then they may come down this wash, when there is water here they have the ability to go in and out, and they can disappear when the water goes away but they can come back up when that water is here, you know, reappear.*
- *The major rock outcrop is where most the major petroglyphs are, but my first stop is to overlook the playa from a distance. It is a dry playa right now, dry lake, I can only imagine the time frame from when the water was there but supplied it, life around it was a thriving resource for the people. Water is life, needed in a place like this. It is what the creator does, provide for us. That way we pay homage to the creator by remembering and facing the symbols, connections, leaving that on the rock, knowledge.*
- *Water babies travel from playas to other water sources in Moapa, Las Vegas, Pahrump, Ash Meadows, Indian Springs, death valley and 40 Mile Canyon.*

2.2.2 Desert Lake Tiering

During a study involving Wellington Canyon and Pintwater Cave it was mentioned that there was a village in the playa and a person mentioned the importance of plants growing in the playa located just below the cave (Stoffle et al. 2000 120-121). Many people:

... talked about [Pintwater Cave] connections with villages all over the area from Pahrump, Indian Springs, Tule Springs, Mt. Charleston, Ash Meadows, Darwin, Death Valley, Caliente and Pahranaagat Valley. In addition, people lived below the cave in the flats near the playas. People were connected to the cave because their shaman came to the cave so they could serve the people, of the

village. There are spiritual connections between the villages and the cave because Wolf, and coyote live here in the creation story. They used it for protection.

Another person said:

At Wellington Canyon, way back, there were blessings by a spiritual man – there were quite a few [of spiritual men] from this area. At Pintwater Cave, way back, there were blessings. A lot of medicine there - real powerful. Need to talk to the plants. In the playa below, there is sage and there were ceremonies there because of the plants and the water. Water is the milk of Mother Earth.

The Bureau of Land Management and the Department of Energy funded a Programmatic Environmental Impact Study (BLM Solar PEIS) of six southwestern US locations, which could potentially be used for large-scale commercial solar projects (DOE 2018). This initiative and assessment was given the label EIS-0403 by the Office of NEPA Policy and Compliance. The massive study was completed in October 2012 (Solar Energy Development Programmatic EIS Information Center 2018). The UofA, BARA ethnographic team was funded to study the Native American response to 9 of these proposed solar study areas, all of which were centered on isolated playa lakes. Most relevant to the LEIS Ethnographic study are findings from field research at (1) East Mormon Mountain, (2) Delamar Valley, (3) Amargosa Valley, and (4) Dry Lake. In all of these locations the tribal representatives who participated in the study identified cultural resource in the playa study area and expressed long-standing connections with these culturally central topographic features. “They are still a part of our culture and lives” is an accurate summary of their responses.

At Delamar Valley (BLM Solar PEIS 2012:9), located just east of Paharangat, the representatives maintained that:

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 Pahranaगत 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 Pahranaगत Valley systems.

Similar cultural interpretations occurred at (5) Lake Tonopah, (6) Escalante Valley, (7) Milford Flats south, (8) Millers, and (9) Wah Wah Valley. This is the most extensive ethnographic study of the meaning of playas in contemporary Native American cultures. This 9-site study demonstrates continued understanding and cultural appreciation of playas for all participating Paiute and Shoshone peoples (Solar Energy Development Programmatic EIS Information Center 2018). The findings were understood by the tribes and representatives to be public and both formally approved of the reports.

2.3 Talking Circle

At the end of the first day of fieldwork the Writers Committee gathered in a Talking Circle to compare notes regarding what they had identified at the site and what these might mean to contemporary Native American culture (Figure 2.17). They also discussed the implications of the LEIS proposal. Because of their commitment to fully thinking through the observations of the day, they left later than expected. The following quotes are from the talking circle discussion.

- *People have been here, probably showing things, stuff like that. and they were doing offerings there too. [Another representative] was talking about stuff left near the petroglyphs. Pieces of rocks, stones.*
- *[This is a corridor] of trails, that is what I think.*
- *It is already a sacred area, the offerings right there alone show that this is a powerful place where you are coming into something.*
- *We want to be able to take minerals from this place we want to be able to take animals from this place.*
- *What stood out for me, see, is there is always going to be water. Even if there is not water flowing now it is showing us what is left of water. The wash itself, you can just see how powerful that water probably flowed continually. Over time it has left its smoothness on the rock, but as you get further down it feeds into the distance to the lake. And on the sides there are also runoffs... So you have water and that is life to all, people and others trekking through here. So with water and the connection, that is a powerful energy force. There is an interconnection not only from distance but throughout.*



Figure 2.17 Talking Circle at Eagle Head

- *Another thing, I am just going to touch on it, maybe other people can expand on it. We come here, and we pray before we come here, tell them who we are, that were here, just to pass through safely. We are saying our prayers and as we go further down we are in a church, we are there to pray, to gather power, then you hear those planes going over and that is a disruption to our religious beliefs.*
- *When I travel from Mesquite to Las Vegas, I always say this place is a storied land. It is a very strong, storied, structured landscape. There are a lot of places here that heal. There are also a lot of places that can take your life out here. More importantly it is not a desert, I would try to tell them. It is a place where our people thrived and lived. And it was not like this 10,000 years ago, there was a lot of different types of vegetation and animals that were here. And if you look on the side, the back of those hills, there is rock writing over there and that shows signs of hundreds of thousands of years of habitation over there at that dry lake. Because the mountain sheep, they show different kinds, all shapes, big ones, small ones, the same size as us. I have been meaning to take them over there but, to me, if our kids do not see what is out here how are they going to stand up and stick up for a landscape from where they did not grow up. One of our elders said it is not just growing up somewhere it is a place where you put your umbilical cord in the ground. And nowadays we do not tell that to our kids, we do not pass that along. You talk to most Anglos, they say “oh I grew up in LA.” They never say I lived. Or they will say I grew up, or I used to go here. Most of them I talk to say it just does not feel right, I feel like I got to go to another job. And two weeks later or two months later, two years later, they are gone. You know, with the Department of the*

Interior, Park Service, all these other places that are under the interior, all these people, they go from job to job. “Oh! Because I want it for my portfolio” or something. Really? Or are you lost?

- *It is more in depth, and you do not have to be spiritual, or have to want to know, you just have to know we are connected to this land that we are on.*

Various discussions took place at the end of day one in the talking circle. Many representatives continued to identify the use and importance of Eagle Head and the surrounding landscape that they visited, viewed, and listened to that day. Additional discussions included the wants and needs of Native American people moving forward, as well as their deep connection to this area.

CHAPTER THREE DAY TWO

Day Two began with an additional orientation at the Corn Creek Visitor Center. Specific resources including plants and animals and the Corn Creek area were discussed. In addition, the trip to White Rock Spring was discussed including the difficulty of reaching the spring itself.

Corn Creek is an area of naturally occurring springs that derive from rain and snow in the surrounding mountains, including Nuvagant (where snow sits, Figure 3.1) (Stoffle et al. 2009). It is the area of Creation for Southern Paiutes where the burden basket came open and all humanity escaped. The Southern Paiutes were last to emerge and so inherited and remained in their Creation Lands. Larry Eddy, a religious leader for the Chemehuevi Southern Paiute people stated:

The Spring Mountain range is a powerful area that is centrally located in the lives, history, and minds of Nuwuvi people. The range is a storied land which exists as both physical and mythic reality both simultaneously connected by portals through which humans and other life forms can and do pass back and forth. This is as it was at Creation.

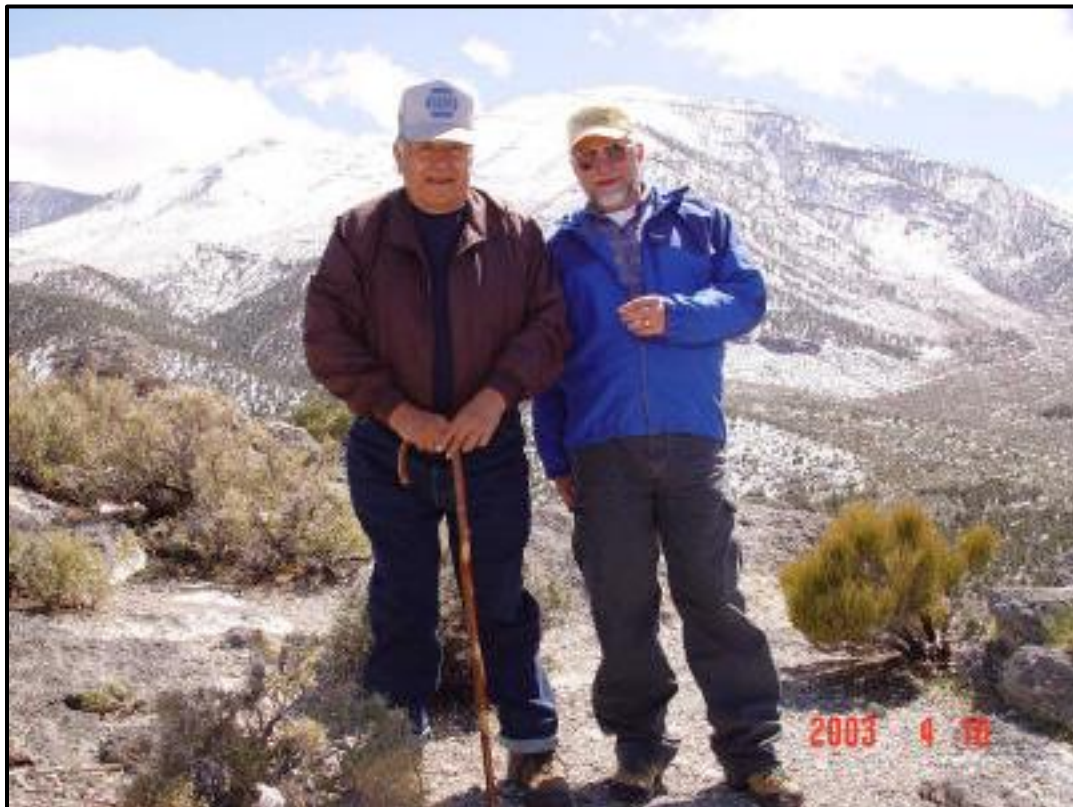


Figure 3.1 Larry Eddy and Rich Stoffle In Front of Nuvagantu (Puha Flows From It 2009: 32)

Corn Creek is also an area where Numic speaking peoples farmed for thousands of years. They did so at this set of springs and of course they also farmed at the massive springs in the Las Vegas valley and downstream to the Colorado River. The latter portion of the hydrological system had at least four large farming villages in what should be called for that time the Las Vegas River. Extensive ethnographic interviews were conducted at Corn Creek during the *East of Nellis* study the following in italics is a summary of those thoughts (2002: 33),

Corn Creek is an oasis spring like those in Ash Meadows. The archaeology of the place documents thousands of years of occupation, with agriculture being here in the proto-historic period. It probably never was the residence of a high chief because it is proximal to such residencies in the Las Vegas and Pahrump areas. Instead Corn Creek was a place that probably served travelers most of the time. Being near the place where all Southern Paiutes were created probably caused it also to be a place for ceremonial pilgrims as well as people going from ecological zone to ecological zone to gather food. It fits the residency place logic of the high chief residencies, but probably constitutes a special case because of being close to areas of ceremony. It may be considered as a ceremonial support community.

Given the Creation centrality of Corn Creek the animals and plants in the area are especially important to the Native Americans whose ancestors lived in this area since the beginning of time (Figure 3.2).



Figure 3.2 Mountain Lion Replica at Corn Creek



Figure 3.3 Day Two, Alamo Road North of Corn Creek Looking South at Spring Mountains

3.1 Joshua Tree Forest

Joshua Trees are one of the cultural resources that grow in many places but they are concentrated here and there. In one area of denser concentrations it is referred as the Joshua Tree Forest. A dense Joshua Tree Forest grows from just north of the Hidden Forest Road (Figure 3.4) and extends for miles in all directions from that point (Figure 3.5 and 3.6). The concerns for the forest are somewhat unique given its density but all Joshua Trees are plants of cultural concern.



Figure 3.4 Hidden Forest Road Looking Northeast

Joshua
Tree
Forest



Figure 3.5 Area of Joshua Forest Concern



Figure 3.6 Alamo Road North with Sheep Mountains to East and Joshua Tree

3.1.1 Native American Comments

The Joshua tree forest is one of few area in the world where Joshua trees proliferate as they are. Visiting representatives remarked on the importance of this area for this ethnobotanical resource. According to one representative, the Joshua tree is important as a “food source” but also has “many uses.” The trees are important not only as a direct resource, but because it provides a habitat for other important animals. One person noted that “animals live in Joshuas” and disturbance could lead to the destruction of the forest. As a result, many “animals would vacate the area.”



Figure 3.7 Joshua Tree And Writers Committee Member

Other comments provided were centered on the rarity of Joshua trees today. Concerns about the Joshua tree forest were centered on the already alarming status of this ethnobotanical resource. As one person noted, continued destruction of Joshua trees could mean that “Native Americans may grow up never knowing or seeing the Joshua tree forest.”

3.1.2 Joshua Tree Forest Tiering

Joshua trees (*Yucca brevifolia*), *umpu* in Western Shoshone, are an important ethnobotanical resource that grow in low to mid elevation zones. The plant serves multiple traditional functions for Native American peoples of the southwest. Fruits are harvested and broiled or roasted before consumption (Stoffle, Evans, and Halmo 1989). The roots are also used in basketry and fibers are used in making sandals. Like many southwest plants, there is some indication that the Joshua tree was transplanted over space to increase availability for traditional purposes.

In the *Native American Plant Resources in Yucca Mountain Area, Nevada*, report, Paiute and Shoshone people were asked about recommendations for the disposition of Joshua trees (Stoffle, Evans, and Halmo 1989). According to that study, protection is recommended and can take place multiple ways. Primarily, it is agreed that the plant be avoided, whereas others recommended transplantation of the plant. Ground disturbance, which has been brought up as a primary concern during this study, can cause negative impacts to the plants health.

3.2 Roasting Pits Overview

The western flank of the Sheep Mountains has dozens of springs, which emerge due to water from snow and rain. These springs have been used since time immemorial by Native Americans but at various time they were the location of massive roasting events. It remains a debate by archaeologists as to what was roasted, such as the fruit from agave, Joshua Trees, or other plants, but clearly from the deep large rock pits there was considerable roasting over a long period.

3.2.1 Native American Comments

Roasting pits are prominent throughout Native American communities. These pits were used to prepare fruits from desert plants such as agave, and are continually used today. Although the roasting pits found within the Desert Wildlife Refuge are not utilized as they were prior to forced removal, they remain important to Native Americans in their songs and stories, and demonstrate cultural continuity. Representatives discussed the construction, use, and cultural significance of roasting pits when visiting the Alternative 3C study area:

- *The roast was not just limited to agave. That may be one of the things in case they start finding other things around there. We use those kind of elements that were important. Moreover, they are embedded in songs and stories that we have about the pits, the significance, the rocks that have been brought in for that. That is why they are not taken away, they have to stay there.*
- *It was communal, people came from many different areas. And it was not just used one time, it was used over and over. So there is continuity in use.*

The astonishing number of roasting pits found within the Desert Wildlife Refuge was a point of interest to visiting representatives. The act of roasting was done on a large scale with multiple communities, therefore, the high concentration of roasting pits at this location suggests that it was a hub for multiple communities to come together for a special occasion. The following quotes were provided by visiting representatives regarding the high concentration of roasting pits in this area:

- *It is like a communal event, for one. Roasting activities were not just one person, come in there to cook a hot dog kind of thing. This was... everybody came together. The second thing is that we know that it was a communal event, it was conducted with special ceremonies related to the roasting activities. They were conducted by, facilitated by people that were born in summer months, the ones that could do it. They would have their helpers or their assistants to do it. They would enter into the area from the eastern side of the pit to get in there and conduct the roasting activities... I think we need to emphasize the interconnectedness between the roasting pits.*

- *It would sort of be like when pine nuts are harvested, or how would you say seasoned and there was planning here. People would all come together and probably roast. It would be sort of like that, people coming together.*
- *Part of a balancing, place where people could come to help restore, rebalance. So maybe this was a hub for those kinds of activities. There are other places around where there are hubs doing other things.*



Figure 3.8 CGTO Writers and UofA Researcher Discuss Roasting Pits

- *When I was growing up, people from Moapa and all these different places, they would come up to Utah as a group or a family and go plant picking with my grandmother. And it was like all this community coming together. And that is what they did.*

Embedded within the communal activity of roasting are aspects of ceremony, spirituality, and politics. Visiting representatives maintained that the gathering that took place in this area was a larger part of an interconnected system of communication between groups. As such, the CGTO Writers Committee discussed coming up with a term to describe the activities that took place long ago in the Sheep Mountains, liking it to a pow-wow. One representative discussed the importance of balancing ceremonies and places of power in roasting activities:

To me that is part of the balance, the balancing. Because it is not only for us, living, we do not want to just make it sound like, okay, we just all come in together and have a fun time, have some barbecue. This is going to be something where everybody comes together but what we are doing, there is not only the physical part of eating it but there is also the spiritual side of doing this, connecting us with the land. We are taking something from the land, putting it into us, we are also giving back to the land through the ceremonies, through the songs, through the stories. And also the third part is, with anything that we do, is also to help sustain that balance and make sure it reoccurs. And so we are having, things are being sustained for us and it is to help keep the balance.

And maybe now, here is one of the other things that would be interesting. So maybe it morphed into, what if you were to do something for when all of this discord is happening. So this is the place where people are removed, because nobody else is coming where we are at right now. And that is what the activities were for, to trying to help build the synergy, the cohesion.

...And the other thing is that, the roasting pits that we are talking about are close to Mount Charleston for Southern Paiute people. And that is the place of origin, that is the place of creation, a place where there is lots of power. And that becomes a power center of sorts, for everybody to come here, to help take what we have and take it back to wherever they are going, to help keep balance in their respective communities as well...

... We have talked before, we have stories about these singers, and these singers have songs that go on and on and on, they do not repeat themselves, they sing. And that is because there are certain responsibilities that they have to keep the balance of the world. But also what we do, I think it is much broader. It is almost like a world balancing ceremony as we know it. It is world balancing to keep everything in check because we see the uncertainty of the cause and effect. The things that are happening in the environment, the way animals may be reaction, plants are not coming back or plants are coming back. They are not only for the physical activity but to make things continue, continue on. And I think with those kinds of discussions there are support areas too. So you may have had the roasting pits, maybe there were people doing that, but just as you were talking about, there are other areas where other people are going. You might have some of those really powerful people and they are talking about, they are contemplating and dealing with things.

And then what happens is we have those big talkers. They share, it is like their proclaim. Okay, we have met, we have talked, here is what is going to happen. And they tell you, they direct you as to what is going to happen. And then that goes back, and people hear the message, hear the word, and now they have to go back, they have to go implement.

Another representative discussed the political importance of these types of gatherings, particularly in a time when gatherings were more difficult to coordinate due to the distance and means of travel afforded to people:

You know, it seems like all of those, what you call the Indian Chiefs, they were down there. And they would talk about political things that were going on in the country. And they would get together and they would talk about, maybe, the white man coming in disrupting their lives and how they are going to handle that. Maybe they are talking about, way later I know that they get together to talk about the distribution, what when on. Even though these things were back then I still saw that going on when my dad was alive. They still got together, in once central place they would come and they would talk about what the best solution to the problem is...

...That is why these gatherings lasted more than a week. They were not just a couple of days, they would stretch it on for a long time, one or two weeks, because there were a lot of things they had to discuss and talk about and decide on. Like now, because we have the luxury of vehicles we all get together, we attend the blessings and zoom we are home. No, it was not like that, because it was rare that we got together. That is when they did all of that.

3.2.2 Roasting Pits Tiering

The following text was taken from the East of Nellis study conducted by the UofA research team (Stoffle, Toupal, and Zedeño 2002: 46- 48). The text in italics are quotes shared by tribal representatives during the study and are about a roasting pit and its area near Shaman Cave (Figure 3.9) which is located about 16 direct miles to the southeast on the eastern side of the Sheep Mountains:

Wildlife species important to Indian people were identified at this site as well. There were signs of “desert turtles” eating small cactus pads (Southern Paiute woman), and a den in the bank of a wash that was home to a badger or fox (Western Shoshone man). Desert bighorn sheep and mule deer live in the surrounding mountains; the deer are known to browse the Joshua tree flowers, which are so abundant on the flats.

Joshua tree flowers taste like Easter Lily and the deer like it too: they’ll come down out of the mountains for it. There are elk on the Spring Mountains. The firewood [for the roasting pit] would be a downed Joshua tree, and the black bush, which makes pretty good firewood (Southern Paiute woman).



Figure 3.9 Roasting Pit in Yucca Valley, Shaman Cave in Background (East of Nellis)

This site is rich in cultural resources, of which the roasting pit is the only obvious one. When the resources here are considered in the context of the Corn Creek site, the surrounding landscape takes on an expanse of cultural meaning that is often unfamiliar to and unexpected by many non-Indian people.

Participants identified the main activities at this site as plant gathering, hunting, and holding ceremonies. The Southern Paiutes knew where the roasting pits were and would use them regularly, usually in the spring, summer, and fall when plants were gathered or animals hunted. This roasting pit, which has been interpreted as an agave roasting pit, was theorized as serving several uses. Because there is no contemporary evidence of agave at this site, many of the Indian participants felt that the abundance of the Joshua trees and yuccas suggested that early stem buds and fruits were roasted here (Figure 3.10 and 3.11). They also felt it was possible that Indian people brought agave here for roasting when they traveled through the area. Although this is a Southern Paiute place, other Indian people used it and other roasting pits including California and Nevada Paiutes, Western Shoshone, and possibly the coastal Indians.



Figure 3.10 Joshua Tree in Bloom near the Roasting Pit (Source East of Nellis)

There is a story called the “Sheep Song” that tells how the mountain sheep is glad to give its life to the Southern Paiute. They know their purpose as a staple to the Southern Paiute diet. They hear the song of the sheep being sung by a carrier of the sheep song and like magic, they appear to offer themselves. Before a hunting, the call/song is sent out. The sheep hear and appear. Then a celebration/laughing song is victoriously sung. The pits are used at nighttime from dusk to dawn. Large hunting parties converged here after a hunt, probably at the end of the day. To prepare the pit, many hands helped. Men with a Hunter Song probably directed the activities. This makes it male energy with male items, so only males are involved. Certain bands, families were responsible for cleaning and preparing (Southern Paiute Woman).

This roasting pit, as are all the other roasting pits, is connected to lithic quarries through the movements of deer, sheep, and antelope. The pits are connected to plants including grains and pine nuts, and to animals. They need to be accessible and are located in the areas that can service as camps near the game being hunted. The pits are connected to water, and to the surrounding land through the quality of the rock, which has to be limestone (Southern Paiute woman).



Figure 3.11 Yucca Bud near Roasting Pit (East of Nellis)

An Owens Valley Paiute woman thought that men would have used this site as a *musa*, or sweat lodge, and for smoking presumably associated with ceremonies and social gatherings. The pit may have been used also to take the stickers off the prickly pear pads. She described this site as a “place to harvest plants, such as yucca, for food and baskets...to hunt sheep and deer.” A trail to Shaman Cave, which stands out from this site, would have made this a place for prayers and ceremonies as well.

3.3 White Rock Spring

White Rock Spring is well known for having a combination of Native American cultural features such as the eight roasting pits, native use plants and a high quality spring. There is also the historical remains of an illegal liquor distillery that was operated during the prohibition period. The area has been surveyed by professional archaeologists and has a high volume of site numbers. There is an old and well developed road extending up slope to the east from the Alamo Road. It begins at 4221 feet in elevation and now ends at 5197 feet at the White Rock Canyon. The old road used to end at the spring, which is located about 6000 feet in elevation, but the upper portion of the road was closed by the Refuge by placing large boulders through the road at the entrance of White Rock Canyon. There are rock peckings near the end of the road, and evidence of longer term Native Americana uses of the area at the spring, to the north of the spring, and at the seven roasting pits to the south. It also is located at a junction of the arid valley ecology with the transition to a wetter pinyon and juniper forest (Figure 3.12). Because of the traditional roads associated with White Rock Spring it has been determined that the area has long been used as a base for hunters.

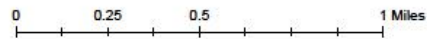
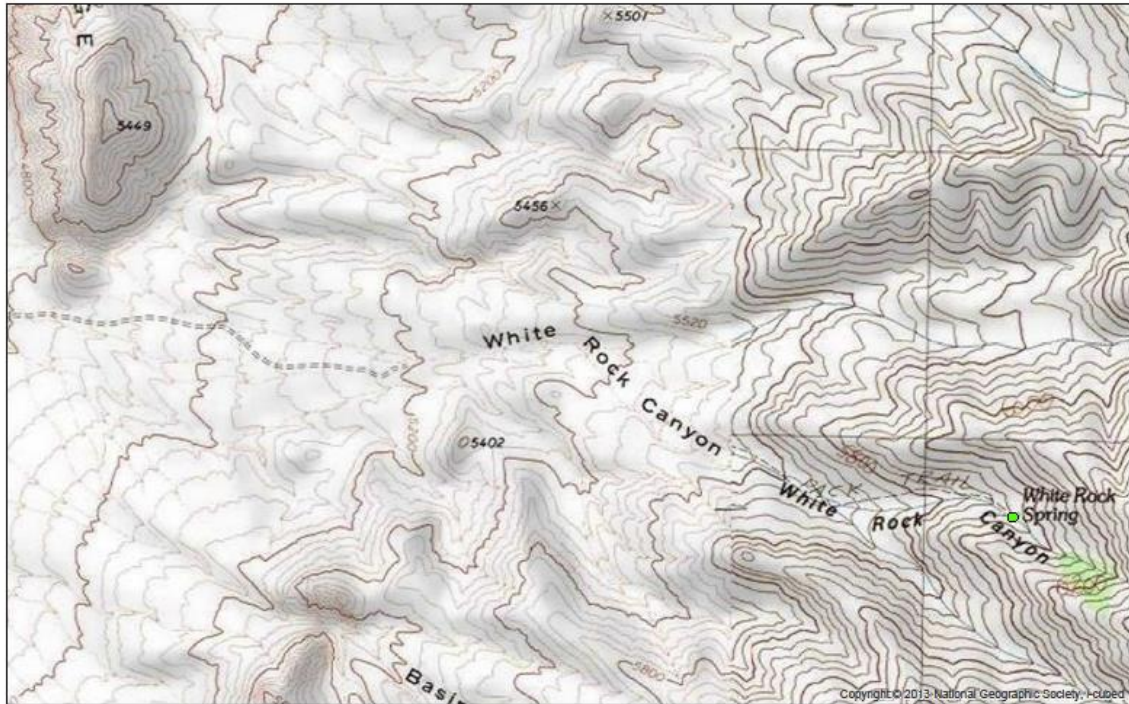


Figure 3.12 Map of White Rock Spring Area

The rapid shifts in elevation at White Rock is especially important from a Native American interpretation perspective because such changes concentrate a wide range of resources in a small location (Figure 3.13). Having many ecological zones in one immediate area makes it more efficient for a larger number of people to use the area for multiple tasks.

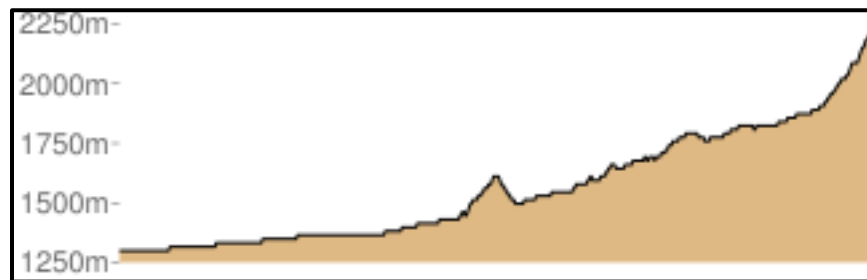


Figure 3.13 Topographic Profile of White Rock Area

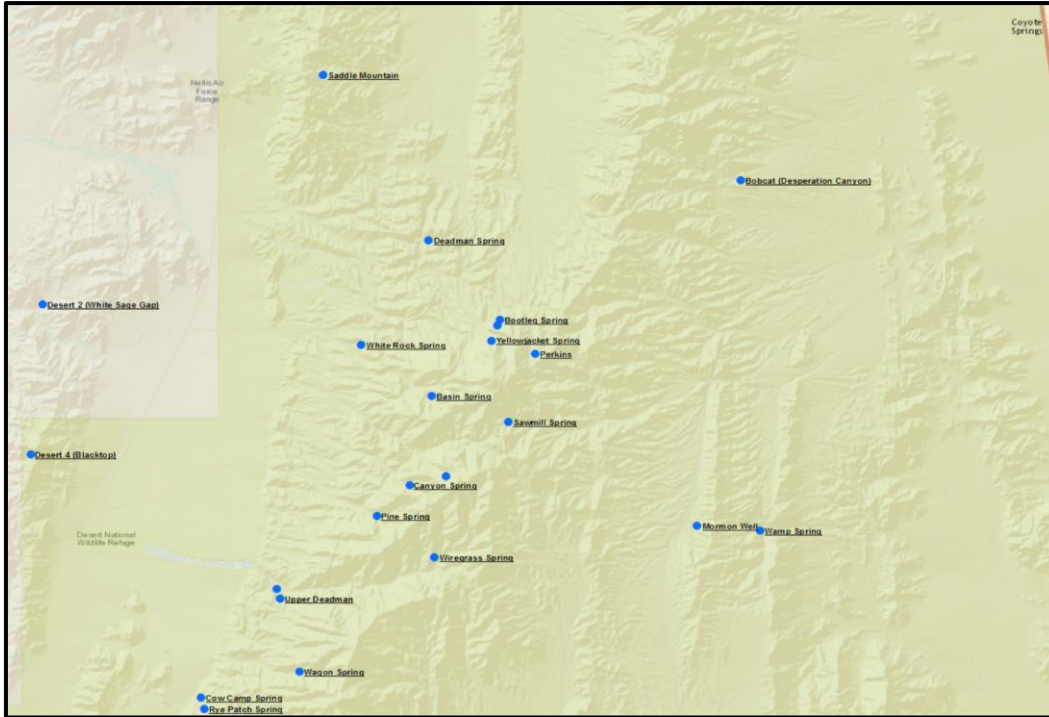


Figure 3.14 Natural Springs in Northern Refuge

Another special feature of the White Rock Spring and its immediate surroundings is that they are centrally located in the valley so the area and its resources are very accessible to multiple ecosystems from trails located along the valley floor (Figure 3.15).



Figure 3.15 End of 4X4 Road and Beginning of Foot Trail to White Rock Spring

The archaeology of the spring area is complex but worthy of special mention because there are seven large roasting pits, which range in diameter from 7 to 20 meters. The archaeology site report focused on these features estimates their total area as 17,782 square meters. And there are other individual roasting pits at or near the spring. Taken in total it is clear that that gathering plants and cooking them was a central feature of the site. What plants were used in this fashion is unclear because despite being called by many archaeologists “Agave Roasting Pits”, there are no agave plants in the area today.

3.3.1 Native American Comments

Comments provided by visiting representatives were divided into two general subjects. The first was natural resources, which include plants and animals in the region that would have been collected and used for various purposes. Additional comments were made about the spring and the importance of springs in general.

3.3.2 Natural Resources

Representatives traveled east from the White Rock Spring trailhead along washes and primitive trails to identify natural and cultural resources in the area. Comments were given on these resources as they traveled towards the spring, located within the Sheep Mountain Range. Springs serve multiple purposes to Native American peoples to include subsistence during travel. One representative noted that springs are “used in songs, places to stay over if travelling, [and a] place to gather food and hunt.” Therefore, the spring is connected to the collection and use of various plants and animals in the region.

Plants noted by visiting representatives include pinyon pines, Indian tea, yucca, rabbit brush, desert trumpet, mountain fat, prickly pear, and juniper. These botanical resources serve various purposes to include nourishment, medication, ceremony, and construction. Many of these plants serve multiple purposes, such as Indian tea, which is made into a drink providing nourishment as well as medicinal purposes. Juniper was mentioned as a plant that can be used for smudging, serving a spiritual purpose, however the berries are also boiled into a tea. Plants in this area are also related to other activities within the Desert Wildlife Refuge. One representative noted that “each of the plants are used to doctor or feed the land,” therefore, many of the plants located around the spring may have served a purpose involving doctoring at the Eagle Head Doctor Rock Shelter.



Figure 3.16 Indicating Natural Resources at White Rock Spring

Plants are also an important component of Native American’s spiritual connection to and stewardship of the land. When visiting the area, one representative noted that “plants have many uses but help keep balance on the land,” postulating that outside of the role they serve for the individuals that use them, plants are also instrumental in keeping the land alive. Similarly, misuse can have consequences on the land and local plant communities: “plants are harvested and prepared for use but if not dosed properly or disrespected the plants will die or change causing the land to cry from loneliness and mal nutrition.”

In addition to plants, representatives provided comments on animals that are present at White Rock Spring. While hiking the trail, tracks of deer and mountain lion were noted, as well as droppings of bobcats, coyotes, and antelope. Other animals spotted include rabbits and red tail hawks. Mountain sheep, a significant animal to many southwest Native Americans, were also noted as being in the area. One representative discussed big horn sheep and the connections Native Americans have to animals:

To me it is a good thing, some of my people look at big horn sheep as being very sacred and important but I also try to tell them it was part of our diet though too. You know, there are animals that are like us, some that are sick, some that have reached their maturity of having more babies... those were the animals we took as native people because we knew what they look like. My grandfather used tell me, because I used to ask him, “can you only hunt this kind of animal?” He said “no, if you look at the animals they are like us, their life changes as they go by and their color changes.”

Animals located in this region are utilized for food, clothing, utensils, and medicines; for example, the bones of some animals are ground down during doctoring like that which would take place at Eagle Head. One representative noted that “sometimes medicine people eat only certain types of animals and sometimes the animals are used in a ceremony, but [the serve an] everyday use for food and other necessities.” The use of an animal may depend on the person, place, or other factors having to do with ceremony. Animals are also viewed as beings with “personalities, special powers, and gifts.”

3.3.3 Spring

Springs are important resources for Native Americans, and are always utilized in the arid region of the southwest; as one representative put it, “if a spring or creek had water, we would use it.” Therefore, the spring is an important feature for visiting representatives. Not only did the spring provide nourishment for plant and animals, the water is also collected for drink, medicine, and ceremony. The water feature at this site was used for “ceremony, for prayers, for survival, for doctoring.” The location of the spring could also be associated with other features in the area such as the *playa*, Eagle Head, and the trails associated with distant places.

Collection is also a sensitive component of spring use. One representative discussed etiquette, noting “there is always prayer and permission asked when used. This is my first time up here, but the protocol is always the same.” To Native American people, visiting and using resources is also essential for the overall health of said resources. They noted that “access by Indian people on a frequent basis to keep water healthy” is necessary, in addition to “traditional songs and prayers.”

3.4 Cultural Landscapes

Native American people tend to view cultural resources as being bound together in broad categories based on functional interdependency and proximity rather than being defined by inherent characteristics (Stoffle, Halmo, and Austin 1997). Most places where Indian people lived and visited contained the diverse necessities of life: plants and animals for food, medicinal plants for continued health, paintings and peckings on rock walls telling about historic events and blessing the area where the people gathered, and water to drink and use in ceremonies of all kinds. Indian people perceive places and the things associated with them as natural components that interrelated into what are called *cultural landscapes* (Figure 3.17). For example, landscape components that have functionally different relationships may include, for example, that some archaeological sites are both ceremonial and plant-gathering areas, and some animals were used as food but they appear in rock paintings and peckings that depict the spiritual relationship between Indian people and animals.



Figure 3.17 The View to Northwest from near White Rock Spring, Desert Lake Playa in the Valley Bottom

Native American people themselves have represented the relationships between animals, plants, and spiritual beings. One dramatic panel (Figure 3.18) located in what is now Canyonlands National park in Utah depicts what archaeologists have termed the “harvest scene.” Critical to this painted panel is a figure representing a spiritual being located to the far right. This being has an outstretched arm. In his hand is Waii (Indian Rice Grass, *Oryzopsis hymenoides*) and coming up his arm are various animals.



Figure 3.18 Harvest Painting, Barrier Canyon Style, Canyonlands National Park, Utah

Figure 3.19 is an enlargement of the spiritual being showing his relationships with the plants and animals. Important to the interpretation of the panel as dealing with harvest is the figure of a woman to his left. She appears to have a hunched back, but actually it is a painting of a woman bending over gathering plants and placing them into her carrying basket.

Relevance of these panels at a general level is that they illustrate the interrelationship of landscape components in the worldview of Native American people in the western United States. More importantly, however, the paintings have a new recent date and so are now being interpreted as having been made by Paiute and Shoshone ancestors less than a thousand years ago. The plants, animals, manner of gathering, and spiritual beings all existed in the Wildlife Refuge and its surrounding region.



Figure 3.19 Close up of Spiritual Being with Animals and Plants Coming to Him

Greider and Garkovitch (1994:8) conclude that: Cultural groups socially construct landscapes as reflections of themselves. In the process, the social, cultural, and natural environments are meshed and become part of the shared symbols and beliefs of members of the groups. Thus the natural environment changes in that it takes on different meanings depending on the social and cultural symbols affiliated with it.

Our research documents five major types of cultural landscapes that are perceived by many Native American peoples (Stoffle, Halmo, and Austin 1997). Categorized in terms of size and function, these types of Native American cultural landscapes are (1) holy land-scapes, (2)

storyscapes, (3) regional landscapes, (4) ecoscapes, and (5) land-marks. Studies of these landscapes require different methodologies (Toupal 2003).

In an essay entitled “Piecing the Puzzle” (Dewey-Hefley, Zedeno, Stoffle, and Pittaluga 1998/1999), our UofA ethnographic team suggested that cultural landscapes are not readily understood since eliciting the patterns and meanings of landscapes usually requires many interviews conducted at various locations over several years. Landscapes cannot be discussed in the absence of this place knowledge, and such knowledge cannot be obtained with a handful of site visits and interviews. Places also are networked through various connections, which create synergistic relationships that increase the complexity and difficulty of understanding cultural landscapes (Zedeno, Austin, Stoffle 2008).

3.4.1 Native American Comments

All of the Native American representatives at one time or the other place emphasis on the traditional belief that the places and resources they were observing were ultimately interconnected with each other and with the ceremonial behaviors of Indian people themselves. Along with this statement of fact, was the on going concern that Indian people need to be with these places and resources for the world to be in balance and healthy. One interview is being highlighted here to represent these perspectives.

The notion that the land and its many resources are integrated and have been designed that way by Creation itself is basic to Native American interpretations of all the earth. The following discussion of the integrated landscape or cultural landscape was offered while looking west at the mountains and the valley below near White Rock Spring.



Figure 3.20 A Cultural Landscape View from White Rock Spring Area

The following interview took place with one representative while viewing the landscape at White Rock Spring.

The first thing I saw when we started coming up from the valley to White Rock spring is you have this very vast canyon. And this is exactly where it is bound by mountains on both sides that help resonate songs or voices from Mt. Charleston that are coming up this way. The mountains are like repeaters. It is part of those echoes, part of those voices coming up the valley. The songs are also kept within these mountains. This big valley comes all the way up and heads up north, there are some mountain peaks in there that are talking to some of the old folks. Some of these mountains were central to helping the songs and the beliefs keep this area in balance. And I think that is really important. When you look at this Joshua Tree forest it is probably a good ten miles long and four miles wide. It is vast. This makes up part of the cultural aesthetic, part of the landscape, that tribal people know. Just as the roasting pits that are around showing that we came to these areas and everything that you see here was put here for a reason. There is not only food, there is medicine.

This landscape is like a basket. So when you put everything together, and when everything is all woven together it is strong, a strong basket. And it holds that strength. This valley is the central corridor. It is just like that with the songs we have. A lot of the time people rely on the salt songs that we have, and those are very, very important, the songs for our journey [to the afterlife], but there are other songs. There are the Fox Songs, Silver Songs, Mountain Sheep Songs, Turtle Songs, and the Badger Songs. These songs go on and on. And there are songs that have to do with the sky and keeping everything in balance. So all of those songs come up this valley and interact with everything else the mountains, the water, the plants, the animals, and the wind. These songs act almost like a blanket that goes over all of this. That is what holds it and keeps it intact. And then when the land is needed you call upon it as your walking and it will come to you.

This cultural landscape is what is vital to us as a people. This is what we have seen. Those mountains are still the same as when the people were here a long time ago, when the world was new, those mountains heard that, saw that, know what is going on. We are right here seeing those exact same things that the other people that were up here saw. They looked in that direction and saw exactly what we are seeing. Although some of the plants and the landscape has changed. There was more water around, and that is in our stories. The playa lake was full of water. The plant communities were different. That is because the weather changes.

The songs are part of the vocal snapshots of the land. In those songs they describe what this land is, what it means, what it is supposed to look like, how it is supposed to be cared for, how you interact with the land. It is like the rules, the rules of engagement, your words that you are singing to all of these things. So we are saying how lush this is, we are talking about those forests, these Joshua Tree forests. That

is, when it hears us, what it remembers. And then, so that is what it wants. It is trying to help hold onto that stuff, hold onto the way it is supposed to be. In songs you are describing the area. You are showing your appreciation for it.

This is probably one of the most unique valleys just because there are no distractions here. This is very, very important. You can see straight up there, there is Mt. Charleston, it is there, that is the place where we were all Created, this is part of the areas that the old people would go. This is how we got into other areas. We came right through here. Those songs too come right through here. They people and songs have been here, and the land has held on to those songs. You cannot find a more pristine valley.

3.4.2 Cultural Landscape Tiering

Given this challenge, the current LEIS ethnographic study has the advantage of three decades of local studies all of which provide the foundations for understanding what cultural resources and significant places exist in the Alternative 3C study area and how these are functionally integrated into cultural landscapes. These studies are used in the LEIS tiering and are referenced in the Scoping Document of September 2017.

Especially relevant to the LEIS ethnography are statements of cultural connections that form various kinds of cultural landscapes in the Wildlife Refuge, which are documented in the East of Nellis study (2002: 48). A few of these are presented here to illustrate the complexity of area landscapes. These quotes are in italic below.

There were many Indian villages throughout the area that were connected or associated with this site according to the Indian participants. Many of these were also connected with other villages and places in southern Nevada and California including Pahrnagat, Corn Creek, Shaman Cave, Pintwater Cave, Gypsum Cave, the cave in Spring Mountain, Mount Charleston, Tule Springs, Indian Springs – Ka ween komah, Mesquite Springs, sometimes called Cactus Springs – Pahgoots, the Redtail Hawk Origin Place, and the southern part of Kawich. The connections among all of these villages include line-of-sight, geographic proximity of more than 50 miles, interrelations, ceremonies, and ceremonial areas, and include nearby mountains, the Colorado River, and the Amargosa River including Beatty, Ash Meadows, Tecopa, and Amargosa Valley (Southern Paiute man A, Southern Paiute man B, Fort Mojave Tribal Archaeologist).



Figure 3.21 Shaman Cave in the Sheep Range Overlooking Yucca Valley (East of Nellis).

The level or intensity of the connectivity of this place is quite complex. According to a Southern Paiute man, Indian Springs – Ka ween komah, is a water source for Southern Paiute people; Cactus Springs – Pahgoots, and Pintwater Cave are connected to this place through water, Indian Springs, and the Southern Paiute Creation Place Mount Charleston – Nuvagh kai, which is nearby. Tule Springs is connected through doctoring and medicine; the Colorado River is connected through the Bird Song, the Salt Song, and Sugarloaf Mountain. A Southern Paiute woman noted that the rocks around the roasting pit area were of an unusual formation. She indicated that they are highly significant because they remind her of the rocks at Sugarloaf Mountain, which the elders have identified as a traditional cultural property, a recognition of cultural significance through listing on the National Register.

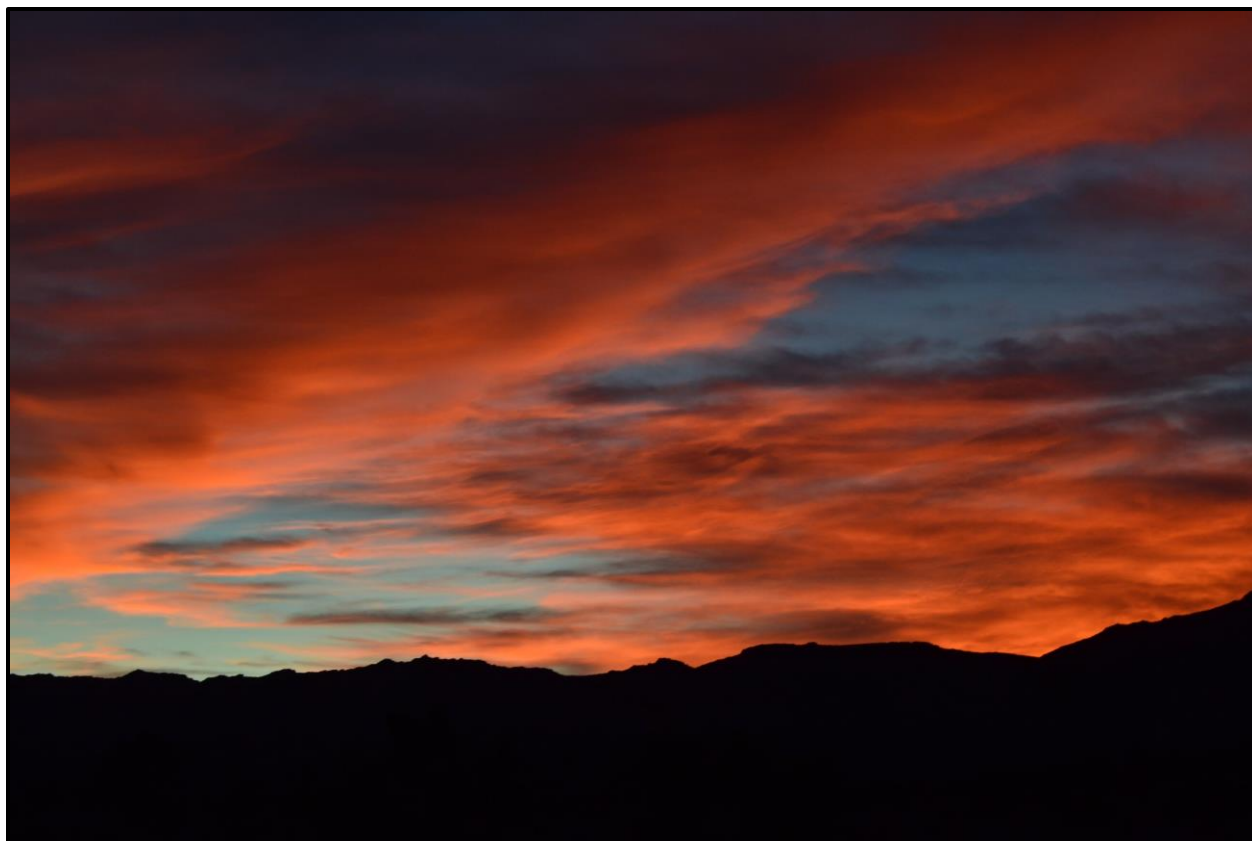


Figure 3.22 Sunset at Desert Wildlife Refuge

This document contains the observations and evaluations of
the members of the CGTO Writers Committee.
When released it will have been fully reviewed and approved.

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